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ABSTRACT

Medical schools in the United States are described in terms of their finances, clinical facilities, students, faculties, and curricula, and the distribution of the schools according to these variables. The report is based on data drawn from the Institutional Profile System maintained by the Association of American Medical Colleges. The current report draws heavily on parts 1 and 2 of the Liaison Committee on Medical Education Questionnaire for 1974-75. (Author/MSE)

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U.S. DEPARTMENT OF HEALTH,
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EDUCATION

[illegible]

MEDICAL SCHOOLS IN THE UNITED STATES

A DESCRIPTIVE STUDY

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Division of Operational Studies
ASSOCIATION OF AMERICAN MEDICAL COLLEGES

February 1977

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EXECUTIVE SUMMARY

This report is the first of a series of annual reports summarizing the status of medical schools in the United States. It is an attempt to set forth and examine the parameters of the universe of medical schools in this country. Admittedly this universe encompasses a tremendous diversity of institutions. It includes newer, developing schools as well as established medical schools. The schools place varying emphasis on undergraduate and graduate medical education, research, and patient care. The delineation of the strata of medical schools will be the subjects of subsequent editions of this report.

Medical schools in the United States are described in terms of their finances, clinical facilities, students, faculties, and curricula. The essential format of the report is the presentation of the distributions of schools on the variables under examination. The number of schools falling in ranges of values on variables of interest are presented throughout the report.

The report is based on data drawn from the Institutional Profile System (IPS) maintained by the Association of American Medical Colleges (AAMC). IPS was designed to maintain data associated with medical schools as institutions. As of August, 1976, there were over 8,000 data elements in the system. The data were drawn from more than 60 sources, including annual questionnaires, special surveys and other AAMC information systems. The current report draws heavily on two sources, Parts I and II of the Liaison Committee on Medical Education (LCME) Questionnaire for 1974-75. Part I of the questionnaire deals primarily with financial characteristicis of the schools, and Part II deals primarily with student and faculty characteristics. For this report selected data were drawn from IPS, appropriately recoded, and additional derived variables were constructed. This subset of IPS data was summarized for this report.

INTRODUCTION

Since 1972, the Association of American Medical Colleges (AAMC), with the support of the Bureau of Health Manpower (BHM), has been systematically gathering and storing information about United States Medical Schools in the Institutional Profile System (IPS). The purpose of developing such a system was to provide ready access to background information for use in the development of public policy relating to medical education. In addition, the intent of the development of IPS was to provide an institutional view of medical education, which would be beneficial to the institutions in planning and policy development as well as to those involved in the development of state, regional, and national policy.

The charge under which this report was prepared called for a "descriptive picture of medical education based on faculty, facility, fiscal, and student data" to be prepared from data in the Institutional Profile System (IPS). Previously, IPS had been used for a number of purposes. It has served as the basis for responses to specific requests for information from the schools, periodic reports of general information (such as the annual IPS Ranking Report), and a number of focused studies. However, this is the first time that data from IPS have been used to provide a comprehensive description of institutional characteristics of medical schools in the United States. For the purposes of this report, and of IPS, a medical school is an institution accredited by the Liaison Committee on Medical Education (LCME) to deliver an undergraduate medical curriculum, and belonging to the Association of American Medical Colleges. At the time this report was initiated the population of medical schools in the United States included three schools accredited to deliver only a two-year basic sciences curriculum and 114 schools conferring the M.D. degree.

A great deal has already been written about medical education in other AAMC studies, in the Journal of Medical Education, and in the Journal of the American Medical Association's annual "Report on Medical Education in the United States". This report will add to the current body of literature in two ways. First, the scope of the study is broad, covering the major aspects of undergraduate medical education: finances, clinical facilities, students, faculty, and curricula; second, the focus of the study is the characteristics of the institutions. The latter feature is unique since other literature focuses on nationally aggregated data or on only one segment of the institution, i.e., the faculty, or the students. In addition, this report examines aspects of the institution which overlap specific areas. For example, such information as the ratio of medical students to medical school faculty members, the amount of money expended by medical schools per medical student, and the number of beds available for instruction per medical student are presented and discussed.

There are a number of limitations of this report which should be noted. First, it is the first attempt to summarize the vast amount of data stored in IPS. As such, the process of developing the report highlighted two areas of concern with respect to the system -- the specific interpretation of certain variables in the system and the accuracy of specific values which were extracted from the system. A second limitation was imposed by the diversity of institutions for which data are stored in IPS. The institutions included not only established, degree-granting medical schools but also new and developing schools and a limited number of schools which do not grant the MD-degree. These schools were included in this report because they are accredited medical education institutions, and to omit them would have been to present a less complete picture of the status of medical education. Finally, the medical schools of this country are extremely complex in terms of the programs they offer, their administrative and financial structures, and how they view themselves in the context of medical education. There is a great deal of variation among schools in the emphasis placed, and resources expended, on medical education, research, and patient care. Since the data on which this report is based are largely self-reported, this complexity, compounded with the diversity of schools which are covered by IPS, has led to a great degree of variation in the responses schools have made to particular questions.

With the limitations noted above, this report should in no way be construed as a policy document. It is, rather, a background document summarizing selected information contained in the IPS system. The criterion for selection of the data to be included in the report was coverage of all major aspects of institutions of medical education in the United States for which data were available. Any omissions of data essential to a description of medical education may be due to lack of data in IPS, inadequacy of the data present, or oversight on the part of the author. Hopefully, such problems will be eliminated in versions of the report developed in ensuing years.

Overview

This report describes the status of medical education in the most recent year for which data are available in IPS, 1974-75. Although IPS contains longitudinal repetitions of many items, some going back as far as 1959-60, only the most current were extracted and examined for this report. Explication of the longitudinal data on medical schools will be left for future reports.

The focus of the current report is the characteristics of medical schools in this country. Realizing that there is wide variation among medical schools in most of the areas considered, the distributions of schools on many variables are presented as well as measures of central tendency. In this way, not only are "average" medical schools on selected measures described, but the degree to which these averages are representative of the spectrum of medical schools is apparent.

While a report such as this can be both broad, covering all aspects of medical education, and detailed, it cannot be totally complete. There are a number of reports in the areas of medical school finances, applicants and students, and faculty that are far more complete in a particular area than is possible here. The objective of this report is to tie together all of these areas through a selected group of variables describing the medical schools. Hopefully, this approach will provide some illumination of the status of medical education, but it will also be valuable if the information presented here raises questions and generates hypotheses which may be addressed in subsequent studies.

The sources of the data and the method by which the Researchable Data Base was created are presented in the following chapter. The data presentation is organized into six sections which comprise Chapter Three. The six sections consist of a general overview followed by sections on finances, facilities, students, (including applicants, enrolled students and alumni), faculty, and curricula.

METHOD

In August, 1976, when entry of the data from Parts I and II of the 1974-75 Liaison Committee on Medical Education (LCME) Questionnaires was completed, AAMC's IPS contained data from over 60 sources. The sources of data included annually administered AAMC surveys of medical schools such as the LCME Questionnaire, Parts I and II, the Faculty Salary Survey, the Curriculum Directory Questionnaire, and the Fall Enrollment Questionnaire; as well as special data collections such as the Health Services Questionnaire (1973), the DHEW Health Facilities Questionnaire (1973), and a survey of Undergraduate Medical Education Projected Tuition and Fees. Data were also transferred to IPS from other AAMC information systems; namely, the Faculty Roster System, the Student Information System, and the AMCAS Applicant File. In addition, data were provided to AAMC by other organizations, such as the American Medical Association (AMA) and the Division of Research Grants (DRG), which is part of the Department of Health, Education and Welfare (DHEW). These sources of data contained over 8,000 potential data elements for each medical school in the United States. The categories of data maintained in IPS include the following: student enrollments, numbers of faculty, revenues and expenditures, facilities, and faculty salaries. In addition, IPS contains data on medical school curricula and programs, student financial aid, and the location of the medical schools.

While the scope of the data in IPS is extremely broad, the quality of that data may be the ultimate limitation to the utility of this study. The data in IPS are largely self-reported. They are either reported directly by the schools, or are extracted from other systems where they are reported by faculty members, students, applicants, or alumni. However, the data are only useful to the degree that information requested is meaningful, that it is reported completely and accurately, and that it is collected in such a way that it is comparable across institutions.

An idea of the limitation of the data may be obtained by consideration of Part I of the Liaison Committee on Medical Education Annual Questionnaire (LCME-I). Simply stated, the objective of this questionnaire is to determine the revenues and expenditures of the part of an organization known as the medical school. There are, however, a variety of types of organizational and financial structures among medical schools, and consequently there is no uniform system of accounting among the institutions. By using the LCME-I, the AAMC attempts to collect information that is comparable across institutions without the rigor of an audited financial report. This necessarily results in some redefinition by the schools in order to accommodate the LCME-I instructions and reporting requirements. In some cases, despite the efforts of AAMC and institutional staff, the schools may not be able to provide exactly the information requested in the LCME-I format, and as a result may under- or over-report a particular item. The data in IPS, and reported in this study, therefore, may be somewhat distorted due to the incompatability of the various accounting systems used by the institutions and the requirements of the LCME-I. The limitations resulting from such distortions are acknowledged and should be given due consideration in the understanding of this report.

The preparation of this report required extraction of selected data elements from IPS and creation of a separate data base compatible with standard data analysis computer packages. The first step in the creation of a "Researchable Data Base" for this study and a number of companion studies was to select the sources in IPS which contained the most current data available on medical schools. A list of the sources which provided the data in the Researchable Data Base can be found in Appendix A.

The selection of variables for inclusion in the Researchable Data Base involved the identification of the most meaningful data in the sources available. The objective of data selection was to develop a comprehensive data set which would be both broad and detailed. Since the data base was to be used for a number of studies in addition to the one reported in this document, the requirements of these studies were taken into consideration. Two of the studies performed using this database (McShane, 1977; and Sherman, 1977) were replications of studies performed in 1975 (Nunn and Lain, 1976; and Sherman, 1976), and the variables which were used in the 1975 studies had to be included in the 1976 data base. The 1975 studies also suggested areas in which future investigation might be rewarding, and variables pertaining to those areas were selected as well. In addition to the use of previous studies, AAMC staff were consulted about particular areas of concern and/or expertise and their suggestions were taken into account in the selection of variables. Variables were selected which pertained to the following four areas: (1) the institution, including census, revenue and expenditure, and facilities data; (2) student, including data on applicants, enrolled students, and alumni; (3) faculty, including numbers of faculty in various categories; and (4) curriculum, which included variables descriptive of the schools' programs, electives, and requirements. A total of 399 variables were selected for transfer from IPS to the Researchable Data Base. There were 172 institutional variables, 127 student variables, 41 faculty variables, and 59 curriculum variables.

In addition to the raw variables selected from IPS, a number of derived variables were computed and stored in the Researchable Data Base. These computed variables included percentages and ratios computed within categories, such as the percent of sponsored research revenue which comes from the federal government, the percent of first year medical students from under-represented minority groups, the ratio of applicants to enrolled first year medical students, and the ratio of basic science faculty to clinical faculty. In addition, several ratios were computed which involved variables from different categories. Examples of these computed variables include total expenditures per medical student, potential teaching beds per medical student, and sponsored program expenditures per full time faculty member. There were a total of 201 variables computed and added to the Researchable Data Base.

A list of the variables in the Researchable Data Base is presented in Appendix B. For data elements from IPS, a variable number, label, IPS number, and IPS source number are presented for identification of the data in the Researchable Data Base and cross-reference to IPS. For computed variables, the variable number and label are presented, accompanied by the formula used to compute the variable. A glossary of abbreviations used in the Researchable Data Base is provided in Appendix C.

The final Researchable Data Base contained 600 variables selected and constructed to comprehensively describe medical schools, their students, their faculty, and their curricula. Frequency distributions of the 117 medical schools for which data were available in IPS were prepared and the distributions of the schools on selected variables were summarized in the graphs, charts, and tables which appear in this report. IPS Researchable Data Base variable numbers of the data summarized are listed at the bottom of each table and figure. Using this information and Appendices A and B, it is possible to determine the source of all data summarized in this report.

RESULTS AND DISCUSSIONS

The descriptive information on medical schools selected from IPS and summarized into tables, graphs, and charts, will be presented in six sections. The first section will present an overview of medical schools in the U.S.; the second will focus on institutional finances; the third on clinical facilities available for medical education; the fourth on students; the fifth on faculties; and the sixth on medical school curricula.

A. Overview of Medical Schools in the United States

At the time this report was initiated there were 117 fully and provisionally accredited medical schools in the United States and its territories.* Figure 1 presents a list of the 117 medical schools which were included in IPS in August, 1976. Three schools, Wright State University School of Medicine, University of South Carolina School of Medicine, and the Uniformed Services University of Health Professions, had not enrolled students in 1974-75, the year on which this report is based. Therefore these three schools were included in the Researchable Data Base, but were not included in the tables presented here except as specifically noted. Of the 114 remaining schools, five were provisionally accredited in 1974-75. These five were Southern Illinois University School of Medicine, Mayo Medical School, University of South Alabama College of Medicine, University of Minnesota--Duluth; School of Medicine, and Eastern Virginia Medical School. One of these five schools, Southern Illinois, received full accreditation in June, 1975, and the other four received full accreditation in June, 1976. Data for these schools, as well as for all 109 fully accredited medical schools are presented in this report when available. For most variables, therefore, there was a potential of 114 observations; however, for most of the variables used in this report data were missing for some schools.

The distribution of medical schools by state is depicted in Table 1. Almost half of the medical schools (53) are concentrated in eight states. New York State has the largest number of medical schools, 12; California is next largest with eight, followed by Illinois and Pennsylvania with seven each, Texas with six, Ohio with five, and Massachusetts and Missouri with four each. Eight states and the District of Columbia have three medical schools, eight states

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* One school, Texas A & M University, received provisional accreditation while this report was in preparation.

FIGURE 1

CLASSIFICATION OF UNITED STATES MEDICAL SCHOOLS FOR WHICH DATA WERE
MAINTAINED IN IPS BY REGION, AND TYPE OF CONTROL,
AUGUST, 1976

NORTHEASTERN

Private

1. Albany
2. Boston
3. Columbia
4. Cornell
5. Dartmouth
6. Einstein
7. Georgetown
8. George Washington
9. Hahnemann
10. Harvard
11. Howard
12. Jefferson
13. Johns Hopkins
14. New York Med.
15. New York Univ.
16. U. of Penn.
17. Pittsburgh (3)
18. Rochester
19. Temple (3)
20. Tufts
21. M.C. of Penn
22. Yale
23. Brown
24. Penn State (2)
25. Mount Sinai

Public

1. SUNY Buffalo
2. SUNY Downstate
3. Maryland
4. New Jersey
5. SUNY Upstate
6. Vermont
7. Rutgers
8. Connecticut
9. Massachusetts
10. SUNY Stony Brook
(Prov)11. Uniformed Services

SOUTHERN

Private

1. Baylor
2. Bowman Gray
3. Duke
4. Emory
5. Miami
6. Meharry
7. Tulane
8. Vanderbilt
9. East Virginia

Public

1. Alabama-Birmingham
2. Arkansas
3. Florida
4. Georgia
5. Kentucky
6. Louisiana New Orleans
7. Louisville
8. Mississippi
9. North Carolina
10. Oklahoma
11. Texas San Antonio
12. South Carolina
13. Texas Southwestern
14. Tennessee
15. Texas Galveston
16. U. of Virginia
17. M.C. of Virginia
18. West Virginia
19. Louisiana Shreveport
20. South Florida
21. Texas Houston
22. Texas Tech
23. South Alabama
(Prov)24. U. South Carolina

MIDWESTERN

Private

1. Chicago Medical
2. U. of Chicago
3. Creighton
4. Loyola Stritch
5. M.C. of Wisconsin (4)
6. Northwestern
7. St. Louis
8. Wash. U. St. Louis
9. Case Western Res. (1)
10. Rush Med. College
11. Mayo

Public

1. Cincinnati (2)
2. Illinois
3. Indiana
4. Iowa
5. Kansas
6. U. of Michigan
7. Minn. Minneapolis
8. Missouri-Columbia
9. Nebraska
10. North Dakota
11. Ohio State
12. South Dakota (5)
13. Wayne State
14. Wisconsin
15. Michigan State
16. M.C. Ohio - Toledo
17. Missouri K.C.
18. So. Illinois
19. Minn. Duluth (6)
(Prov)20. Wright State

WESTERN

Private

1. Loma Linda
2. Southern Calif.
3. Stanford

Public

1. Calif., San Francisco
2. Calif., Los Angeles
3. Colorado
4. Calif., Irvine
5. New Mexico
6. Oregon
7. Utah
8. U. of Wash., Seattle
9. Arizona
10. Calif., San Diego
11. Hawaii
12. Calif., Davis
13. Nevada (6)

NO REGION

1. Puerto Rico

NOTES:
(1) Privately endowed with partial state aid.
(2) Privately endowed, state supported.
(3) State Related.
(4) Privately endowed, state aided.
(5) Full accreditation as a School of Basic Medical Science, provisional accreditation as an M.D. granting institutions.
(6) Accreditation as a 2-year School of Basic Medical Science (does not grant the M.D. degree).

Data Source: VAR001, VAR002, VAR004, VAR006, VAR007.

TABLE 1

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY STATE, 1974-75

Number of Schools Per State	Number of States	Cummulative Number of Schools	State and Territory Names
12	1	12	New York
8	1	20	California
7	2	34	Illinois, Pennsylvania
6	1	40	Texas
5	1	45	Ohio
4	2	53	Missouri, Massachusetts
3	9	80	District of Columbia, Florida, Louisiana, Maryland, Michigan, Minnesota, N. Carolina, Tennessee, Virginia
2	8	96	Alabama, Connecticut, Georgia, Kentucky, Nebraska, New Jersey, South Carolina, Wisconsin
1	21	117	Arkansas, Arizona, Colorado, Hawaii, Iowa, Indiana, Kansas, Mississippi, North Dakota, New Hampshire, New Mexico, Nevada, Oklahoma, Oregon, Puerto Rico, Rhode Island, South Dakota, Utah, Vermont, Washington, West Virginia,
0	6	117	Alaska, Delaware, Idaho, Maine, Montana, Wyoming

Data Source: VAR003

have two, and twenty states and the Commonwealth of Puerto Rico, have one medical school each. Six states -- Alaska, Idaho, Montana, Wyoming, Delaware, and Maine -- do not have a medical school within their boundaries. These states, however, are generally served by medical schools in other states. For example, the University of Washington School of Medicine in Seattle has a cooperative program serving the states of Alaska, Montana and Idaho, as well as Washington.

On the basis of the information presented in Table 1 it appears that medical schools are concentrated in areas of high population density. This appearance is substantiated by Table 2, which presents information on the size of the Standard Metropolitan Statistical Areas (SMSA's) in which medical schools are located. On examination of Table 2 it is apparent that the schools are about evenly divided between SMSA's that have populations of less than 1,000,000 and SMSA's with populations greater than 1,000,000. In 1974-75 there were 55 schools in SMSA's with populations less than 1,000,000, and 59 schools in SMSA's with more than 1,000,000 inhabitants. However, the 55 schools in the smaller SMSA's were in 52 different SMSA's, while the other 59 schools were in only 31 different SMSA's. When the SMSA's with populations of more than 5,000,000 are considered, it becomes apparent that more densely populated areas support larger numbers of medical schools. In the three SMSA's with over 5,000,000 inhabitants there are 16 medical schools.

Another noteworthy aspect of the location of medical schools is the ratio of population in the SMSA in which the school is located to the number of medical students enrolled in schools in the SMSA. The distribution of schools with respect to the ratio of population to medical students in the SMSA is shown in Figure 2. The range of the ratio was from less than 500 people per medical student in an SMSA to more than 11,500 people per medical student. The high end of the range is misleading, however, because, as shown in Figure 2, only four schools are in SMSA's where there are more than 5,000 people per medical student. The median of the ratios was 1711 people per medical student, and 50 percent of the schools were in SMSA's in which the ratio was between 900 and 2480 people per medical student.

In addition to location, an interesting general characteristic of medical schools is the year in which they were founded. In Table 3 the year of founding of all 117 medical schools in the IPS Researchable Data Base is presented. More than half (59 percent) of the medical schools in operation in

TABLE 2

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY SIZE OF LOCAL SMSA*

Population	Number of Schools	Number of SMSA'S
Less than 100,000	11	10
100,000 - 500,000	22	22
500,000 - 1,000,000	22	20
1,000,000 - 2,000,000	23	19
2,000,000 - 5,000,000	20	9
More than 5,000,000	16	3
Total	114	83

* Standard Metropolitan Statistical Area
Data Source: VAR171

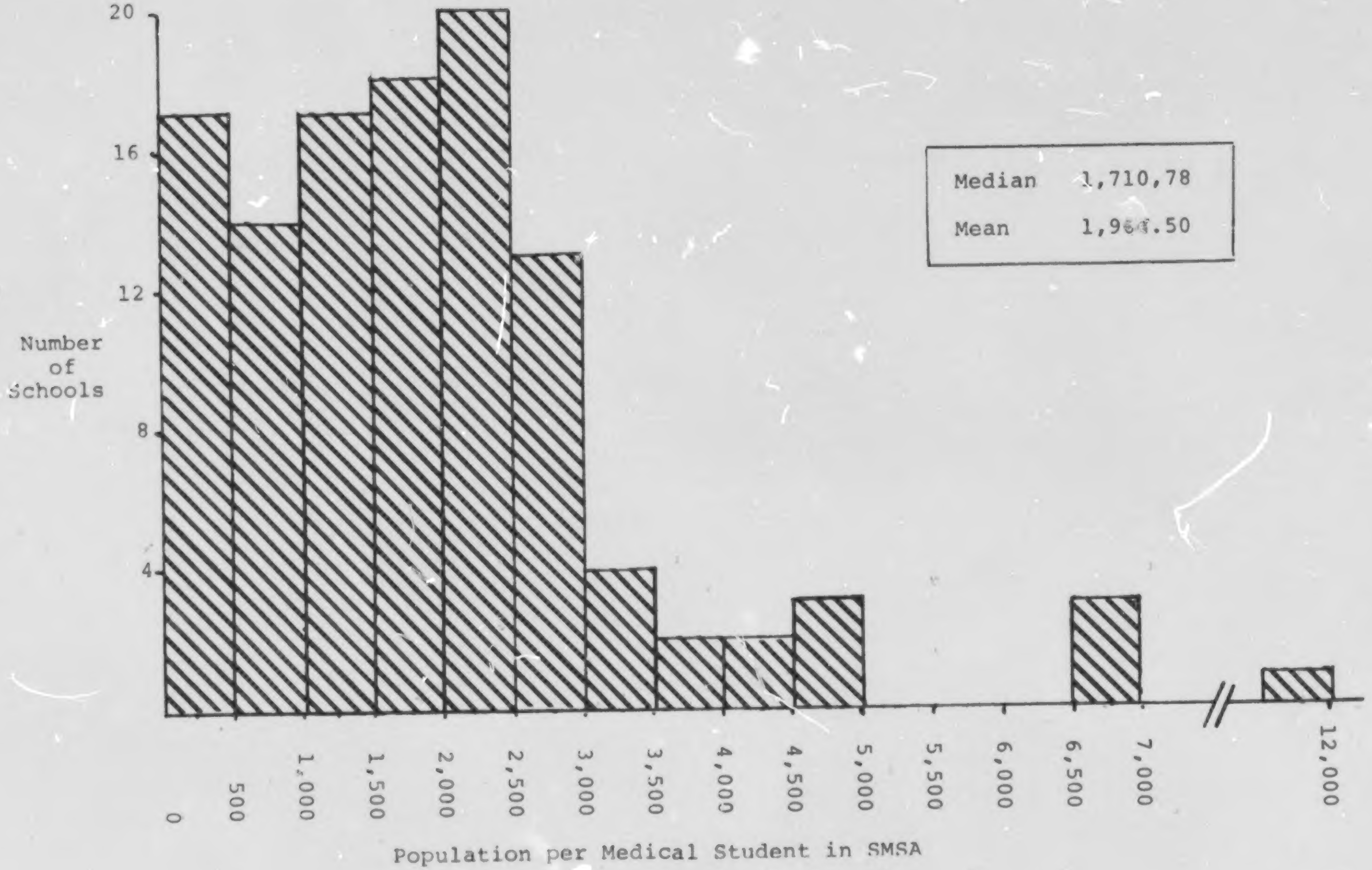

FIGURE 2

DISTRIBUTION OF MEDICAL SCHOOLS WITH RESPECT TO THE RATIO OF POPULATION OF SMSA IN WHICH MEDICAL SCHOOL IS LOCATED TO THE NUMBER OF MEDICAL STUDENTS ENROLLED IN THE SMSA

Data Source: INC001

TABLE 3

DISTRIBUTION OF EXISTING U.S. MEDICAL SCHOOLS BY YEAR FOUNDED

Year	Number of Schools Founded	Cummulative Number of Schools
Prior to 1800	4	4
1800 - 1850	22	26
1851 - 1900	30	56
1901 - 1910	13	69
1911 - 1920	5	74
1921 - 1930	2	76
1931 - 1940	1	77
1941 - 1950	3	80
1951 - 1960	7	87
1961 - 1970	24	111
1971 - 1974	6	117

Data Source: VAR005

1974-75 were opened prior to 1910, which was about the time of the Flexner report describing the status of medical education in the U.S. and providing the impetus for change directed at improving the training of physicians. Only 18 more medical schools (15 percent) were founded between 1911 and 1960, an average of less than four per decade. However, in the decade-and-a-half from 1961 through 1975, an additional 30 medical schools were opened. The majority of the schools in this last group have opened since 1968. This surge of new medical school openings in the past decade reflects the pressure from many sources to increase the number of doctors being trained to provide medical care in this country. An interesting extension of the current series of studies about medical schools might be a comparison of these relatively new medical schools with the more established schools in this country.

B. Medical School Finances

One dimension on which medical schools may be described and compared is the financing of the institutions. Financing in this context refers to the revenues and expenditures reported by medical schools, and must be viewed in light of the tremendous diversity of programs offered by the reporting institutions. The relationships of medical schools to parent institutions and affiliations with teaching hospitals and other clinical facilities further complicate the situation. Some of the questions which are relevant in this context are "How much does it cost to operate a medical school?", "Where do medical schools get their money and how do they spend it?", and "How much money do medical schools spend for each student and each faculty member?".

Revenues

The distribution of medical schools by their total revenues reported on the LCME-I Questionnaire for the 1974-75 academic year is presented in Table 4. Medical schools reported total revenues ranging from less than $5 million to over $80 million, with a mean of almost $27 million. A majority of the schools, 65, reported between $5 million and $30 million in revenue, while only 13 schools reported over $50 million in revenue. When these figures are summed for the 111 medical schools that reported revenues for 1974-75, the total amount of revenue received by medical schools in the United States in 1974-75 was approximately $3 billion.

The revenues received by medical schools can be roughly categorized as regular operating revenue and sponsored revenue. The regular operating revenue is the revenue which supports the day-to-day operations of medical schools, while the sponsored revenues are those revenues from either government or private sources which are earmarked by the provider of the funds for specific programs or projects such as research or training. The distribution of medical schools with respect to regular operating revenue and sponsored revenue is presented in Table 5. In 1974-75 medical schools reported regular operating revenues ranging from less than $5 million to over $30 million. However, 74 schools reported regular operating revenues between $5 million and $20 million, and the mean regular operating revenue was $13 million. The schools reported a wider distribution of sponsored revenues, ranging from less than $1 million to over $50 million. Eighty-seven schools reported sponsored revenue between $1 million and $20 million, and the mean sponsored revenue was $13.5 million.

TABLE 4

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY TOTAL CURRENT FUNDS REVENUE, 1974-75

Total Revenue (Millions of Dollars)	Number of Schools
Less than 5	7
5 - 10	10
10 - 25	18
15 - 20	12
20 - 25	13
25 - 30	12
30 - 35	8
35 - 40	8
40 - 45	7
45 - 50	3
50 - 55	2
55 - 60	5
60 - 70	4
70 - 80	0
80 - 90	2
Missing	3
Total	114
Mean	26,897,950
Median	22,906,130

Data Source: VAR213

TABLE 5

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY REGULAR OPERATING, SPONSORED AND TOTAL REVENUES, 1974-75

Revenue Range (Millions of Dollars)	Number of Schools		
	Regular Operating Revenues	Sponsored Revenues	Total Revenues
Less than 1	0	2	0
1 to 5	14*	26	7
5 to 10	25	29	10
10 to 15	29	16	18
15 to 20	20	16	12
20 to 30	19	10	25
30 to 40	3	6	16
40 to 50	0	4	10
Above 50	0	2	13
Missing	4	3	3
Total	114	114	114
Mean	13,018,600	13,513,590	26,897,950

*Reflects total operating revenue which appears on the accounts of the medical schools as reported on LCME-I. Schools reporting total operating revenues under $5 million included new schools and 2-year basic science schools.

Data Source: VAR213, VAR372, VAR213 - VAR372

A more detailed breakdown of the average revenue medical schools received from specific sources is shown in Table 6. The table gives mean revenue from each of 13 sources for all medical schools reporting, for public schools, and for private schools. In addition, each mean revenue is reported as a percentage of the total of the means. In this table it is possible to see some of the differences between public and private medical schools in terms of the sources of their revenue. When the sum of the mean revenues from each of the sources is considered, the total for all schools is $27 million. The sum of means for public schools is $24 million, while the sum of means for private schools is $30 million. This finding would seem to indicate that private medical schools have, on the average, considerably more revenue than do public schools. However, almost all of the medical schools in the developing stages, which have comparatively low total revenues, are public schools, and the disparity between public and private medical schools with respect to total revenues may be due, wholly or in part, to the impact of the developing schools.

There are also some differences, apparent in Table 6, in the funding sources of private and public medical schools. Public medical schools receive about one third of their revenue, on the average, in the form of unrestricted government funds, mainly state appropriations. Other major sources of revenue for public schools are sponsored research (22 percent), sponsored teaching and training programs (12 percent), medical service plans (11 percent), and sponsored multi-purpose and service programs (10 percent). Private medical schools, on the other hand, received the largest amount of their revenues for sponsored research (30 percent), followed by sponsored multi-purpose and service programs (15 percent), sponsored teaching and training programs (11 percent), and medical service plans (10 percent). Private medical schools, on the average, received only 6 percent of their funds from unrestricted government sources; and they received 7 percent of their funds from tuition and fees, while public medical schools received only 3 percent from this source.

The mean values of revenues from particular sources, while informative about medical schools in general, may not be accurate reflections of a particular school; there is a great deal of variability among medical schools in terms of both the dollar amounts and percentages of revenue received from various sources. This variability is depicted in Tables 7 and 8. The range of the amount of revenue received by the most representative medical schools (those falling between the twenty-fifth

TABLE 6

MEAN REVENUE AND PERCENT OF TOTAL REVENUE OF PUBLIC, PRIVATE, AND ALL U.S. MEDICAL SCHOOLS BY SOURCE 1974-75

	ALL SCHOOLS (N = 114)			PUBLIC SCHOOLS (N = 67)			PRIVATE SCHOOLS (N = 47)		
Source of Revenue	Number of Schools Reporting	Mean Revenue	% of Total Mean Revenues	Number of Schools Reporting	Mean Revenue	% of Total Mean Revenues	Number of Schools Reporting	Mean Revenue	% of Total Mean Revenues
Tuition and Fees	107	1,219,234	4.5	63	631,478	2.6	44	2,060,803	6.7
Unrestricted Government Funds *	111	5,702,764	21.0	66	8,294,821	33.9	45	1,901,183	6.1
Endowment	107	459,328	1.7	62	63,715	.3	45	1,004,396	3.2
Gifts	106	280,105	1.0	62	137,142	.6	44	481,554	1.6
Sponsored Research	111	6,940,367	25.6	66	5,307,390	21.7	45	9,335,497	30.2
Other Separately Budgeted Research	109	47,961	.2	65	78,182	.3	44	3,316	0
Sponsored Teaching and Training Programs	111	3,181,784	11.7	66	2,949,281	12.0	45	3,522,959	11.4
Sponsored Multi-Purpose and Service Programs	110	3,439,264	12.7	66	2,537,706	10.4	44	4,791,631	15.5
Total Recovery of Indirect Costs	110	1,775,421	6.6	65	1,173,194	4.8	45	2,645,314	8.5
Sales and Services of Educational Departments	111	137,517	.5	66	112,602	.4	45	174,047	.6
Organized Activities of Educational Departments	111	413,611	1.5	66	254,430	1.0	45	647,079	2.1
Medical Service Plans	108	2,809,066	10.4	65	2,596,891	10.6	43	3,129,813	10.1
Other	111	710,970	2.6	66	346,552	1.4	45	1,245,454	4.0
Total		27,117,392	100.0		24,483,384	100.0		30,943,046	100.0

*Includes federal, state, and local government funds treated by the school as regular operating revenue.

Data Source: VAR182, VAR189, VAR190, VAR191, VAR195, VAR196, VAR200, VAR204, VAR208, VAR209, VAR210, VAR211, VAR212.

and seventy-fifth percentiles) from various sources is presented in Table 7. In revenue received from tuition and fees, for example, fifty percent of the schools received between $367,000 and $1,900,000. Similarly, the range of revenue reported from unrestricted government sources for the middle fifty percent of the schools was between $1.4 million and $8.3 million. Other sources in which the amount of revenue from schools varied greatly were sponsored research, sponsored teaching and training, and sponsored multi-purpose and service programs. There were a number of sources from which a large number of schools reported receiving no revenue. At least twenty-five percent of the medical schools reported receiving no endowment income, no income from gifts, and no income from medical service plans; at least 50 percent of the schools reported no revenue from departmental sales and services or departmental activities; and at least 75 percent of the medical schools reported having no separately budgeted research revenue other than sponsored research.

Table 8 depicts the distribution of public, private, and all medical schools with respect to the percentage of revenue received from various sources. From Table 8, it is apparent that the mean percentage of income from a given source, while indicative of the situation in general, may not be representative of any particular medical school's situation. For example, in terms of percent of revenue from tuition and fees, all but one of the publicly supported medical schools in the U.S. reported receiving eight percent or less of their revenue from this source, while 16 private medical schools reported receiving more than 10 percent of their revenues from tuition and fees. The difference between public and private medical schools with respect to the percent of revenues received from unrestricted government sources is also apparent in Table 8. All of the public medical schools received more than ten percent of their revenues from this source, and 50 of the 66 public medical schools reporting this information received 25 percent of their revenue or more from unrestricted government sources. On the other hand, 31 of the 45 private medical schools reporting received less than 10 percent of their revenue from this source, and only 4 private medical schools received more than 25 percent of their revenue from unrestricted government sources. Other sources in which there was a great deal of variation among both public and private medical schools in percent of revenue received were sponsored research, sponsored teaching and training programs, sponsored multi-purpose and service programs, and medical service plans.

TABLE 7

INTERQUARTILE RANGE OF THE DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY REVENUE RECEIVED FROM SELECTED SOURCES, 1974-75

(Thousands of Dollars)

Source	25th Percentile	Median	75th Percentile
Tuition & Fees	367.2	1,087.1	1,888.2
Unrestricted Revenue From Governmental Sources*	1,454.5	4,952.7	8,320.8
Endowment	0.0	26.8	273.9
Gifts	0.0	59.0	278.7
Sponsored Research	2,041.0	4,384.0	9,444.6
Separately Budgeted Research	0.0	0.0	0.0
Sponsored Teaching and Training	1,426.2	2,527.3	4,625.1
Sponsored Multi Service Programs	147.9	1,696.3	3,763.0
Recovery of Indirect Costs	453.8	1,067.8	2,194.4
Departmental Sales and Services	0.0	0.0	52.3
Departmental Activities	0.0	0.0	139.4
Medical Services Plans	0.0	2,153.7	4,380.0

*Includes funds from federal, state and local government sources treated as regular operating revenues by the schools.

Data Source: VAR182, VAR189, VAR190, VAR191, VAR195, VAR196, VAR200, VAR204, VAR208, VAR209, VAR210, VAR211.

TABLE 8

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY PERCENT OF REVENUE RECEIVED FROM SELECTED SOURCES, 1974-75

Source		PERCENT																
		0-2	3-4	5-6	7-8	9-10	11-15	16-20	21-25	26-30	30-35	36-40	41-45	46-50	51-60	61-70	71-100	Missing
Tuition and fees	Public	22*	27	12	1	0	1	0	0	0								
	Private	0	7	13	3	5	8	6	1	1								
	Total	22	34	25	4	5	9	6	1	1								10
Unrestricted Government Funds**	Public	0	0	0	0	0	4	5	7	10	4	8	7	5	5	5	6	
	Private	12	6	7	1	5	5	1	4	2	1	0	0	1	0	0	0	
	Total	12	6	7	1	5	9	6	11	12	5	8	7	6	5	5	6	6
Endowment	Public	59	2	0	1	0	0											
	Private	26	8	5	3	1	2											
	Total	35	10	5	4	1	2											10
Gifts	Public	55	6	1	0													
	Private	30	7	5	2													
	Total	85	13	6	2													11
Sponsored Research	Public	2	2	1	3	8	15	14	7	5	5	3	1	0				
	Private	1	0	0	4	0	3	6	6	7	6	3	4	5				
	Total	3	2	1	7	8	18	20	13	12	11	6	5	5				6
Separately Budgeted Research	Public	64	1															
	Private	44	0															
	Total	108	1															8

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*The numbers in the table represent the number of schools receiving a percentage of their revenues within the range indicated from a particular source.

**Includes funds from federal, state, and local government services treated by the schools as regular operating revenue.

TABLE 8 (CONTINUED)

Source		0-2	3-4	5-6	7-8	9-10	11-15	16-20	21-25	26-30	30-35	36-40	41-45	46-50	51-60	61-70	71-100	Missing
Sponsored Teaching Training	Public	3	1	4	12	13	14	9	4	4	0	0	1	0	1		5	
	Private	1	2	1	4	7	18	6	4	0	0	0	0	2	0			
	Total	4	3	5	16	20	32	15	8	4	0	0	1	2	1			
Multi-Service Programs	Public	18	2	10	9	4	10	6	1	3	1	1	1	[illegible]	0			
	Private	14	3	5	6	1	2	4	1	3	2	0	1	1	1			
	Total	32	5	15	15	5	12	10	2	6	3	1	2	1	1			
Recovery of Indirect Costs	Public	14	24	12	9	4	2											
	Private	2	7	8	9	11	8											
	Total	16	31	20	18	15	10											
Department Sales and Services	Public	63	1	0	2													
	Private	41	3	1	0													
	Total	104	4	1	2													
Departmental Activities	Public	58	3	3	0	1	1	0	0	0								
	Private	35	4	0	1	1	2	1	0	1								
	Total	93	7	3	1	2	3	1	0	1								
Medical Services Plans	Public	20	6	6	3	4	7	8	7	3	0	1						
	Private	14	2	3	0	4	7	7	3	1	2	0						
	Total	34	8	9	3	8	14	15	10	4	2	1						
Other Sources	Public	56	5	0	0	1	1	2	1	0	0	0	0	0	0			
	Private	20	10	5	4	0	2	2	0	1	0	0	0	0	1			
	Total	76	15	5	4	1	3	4	1	1	0	0	0	0	1			6

Data Source: Percentages computed from VAR182, VAR189, VAR190, VAR191, VAR195, VAR198, VAR200, VAR204, VAR208, VAR210, VAR211, VAR212, VAR213.

Expenditures

To complete the picture of medical school finances it is necessary to look at how the medical schools spend their money as well as the sources of their funds. The division of mean expenditures of public, private and all U.S. medical schools is presented in Table 9. From the information presented in Table 9 it appears that medical schools reported total expenditures slightly less than their reported total revenues.* The total of mean expenditures in 1974-75 was $26.6 million while the total of mean revenues for the same period (Table 6) was $27.1 million. Comparing the figures in Table 9 with those in Table 6 in corresponding categories, it should be noted that medical school expenditures in sponsored areas are, by definition, equal to the revenues received in those areas. However, since the total of mean expenditures was lower than the total of mean revenues, the percentage of expenditures in sponsored areas were consistently slightly higher than the percentage of revenues in these areas. Overall, sponsored programs (research, teaching and training, and multi-purpose and service) accounted for an average of 51 percent of medical school expenditures; this figure was 58 percent for private medical schools and only 44 percent for public medical schools. In 1974-75 public medical schools spent more money on the average for instruction and departmental research, both in terms of actual expenditures (an average of almost $9 million) and percentage of total expenditures (36 percent), than did private medical schools ($7 million and 23 percent). Other expenditures, namely those which supported libraries, operation and maintenance of physical plant, and administrative operations, were both relatively minor and consistent for all schools.

As was the case with revenues, the average expenditure figures do not necessarily represent the actual case for any particular school. Figures 3a through 3e depict the distributions of medical schools by percentage of expenditures in five categories: medical instruction and departmental research, sponsored research, sponsored teaching and training programs, sponsored multi-purpose and service programs, and administration. In each of these figures it is apparent that there are concentrations of schools with similar percentages of expenditures in each area, but that there are a number of schools for which these figures would not be representative. For example, in Figure 3a there are two separate concentrations of schools -- 59 medical schools reported devoting between 10 and 30 percent

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* This may be due to the use of unweighted means in this comparison and to the reporting requirements of the LCME-I questionnaire.

TABLE 9

MEAN EXPENDITURE AND PERCENT OF EXPENDITURE OF PUBLIC, PRIVATE, AND ALL U.S. MEDICAL SCHOOLS BY CATEGORY, 1974-75

	ALL SCHOOLS (N = 114)			PUBLIC SCHOOLS (N = 67)			PRIVATE SCHOOLS (N = 47)		
Expense Category	Number of Schools Reporting	Mean Expenditure	% of Total Mean Expenditures	Number of Schools Reporting	Mean Expenditure	% of Total Mean Expenditures	Number of Schools Reporting	Mean Expenditure	% of Total Mean Expenditures
Instruction and Departmental Research MD Degree	108	6,279,176	23.6	65	6,825,705	28.2	43	5,453,027	18.0
Instruction and Departmental Research Other Programs	108	1,693,519	6.4	65	1,875,550	7.8	43	1,451,114	4.8
Organized Activities Related to Educational Departments	111	530,962	2.0	66	451,768	1.9	45	647,113	2.1
Total Sponsored Research	111	6,941,636	26.0	66	5,307,390	21.9	45	9,338,529	30.8
Other Separately Budgeted Research	111	107,258	.4	66	174,170	.7	45	9,119	0
Sponsored Teaching & Training Program	111	3,181,525	11.9	66	2,948,265	12.2	45	3,523,640	11.6
Sponsored Multipurpose and Service Programs	110	3,439,664	12.9	66	2,537,706	10.5	44	4,792,601	15.8
Extension and Public Service Programs	111	262,176	1.0	66	247,975	1.0	45	283,003	.9
Libraries	110	296,135	1.1	65	304,567	1.3	45	283,954	.9
Operation and Maintenance of Physical Plant	109	1,540,800	5.8	66	1,359,316	5.6	43	1,819,357	6.0
Administration and General Expense	111	2,377,918	8.9	66	2,150,950	8.9	45	2,710,805	8.9
Total		26,650,769	100.0		24,183,362	100.0		30,312,262	99.8

Data Source: VAR214 to VAR224, inclusive.

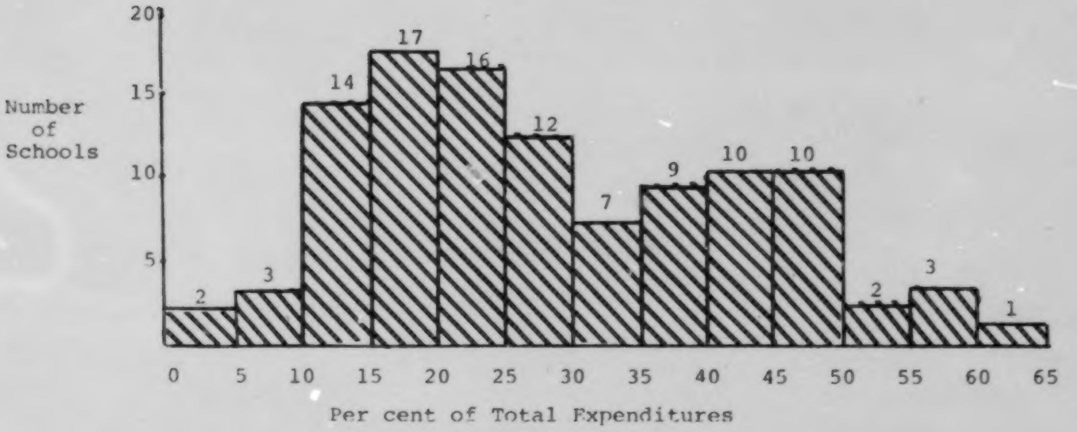

FIGURE 3a

PERCENT OF MEDICAL SCHOOL EXPENDITURES DEVOTED TO MEDICAL INSTRUCTION AND DEPARTMENTAL RESEARCH

Data Source: INC020

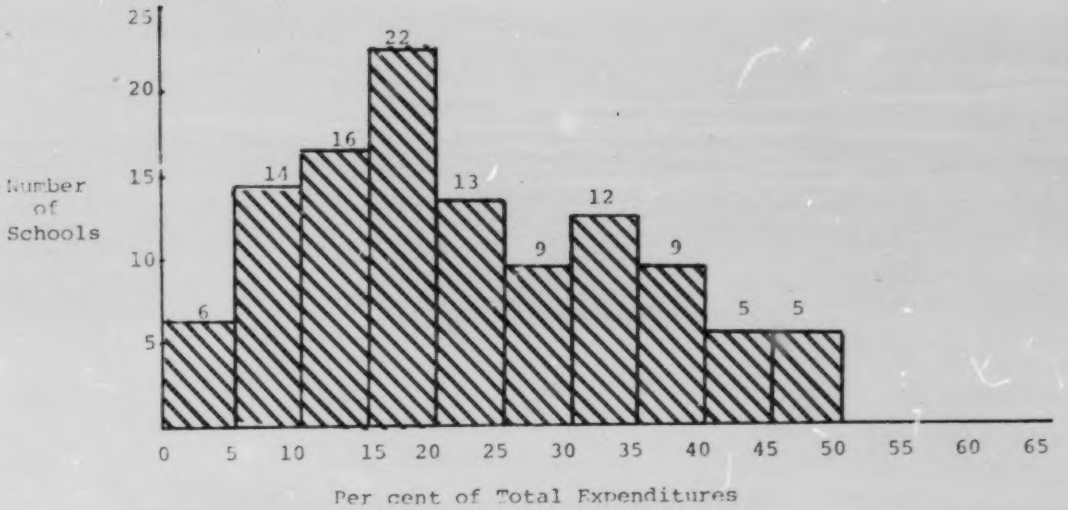

FIGURE 3b

PERCENT OF MEDICAL SCHOOL EXPENDITURES DEVOTED TO SPONSORED RESEARCH

Data Source: INC021

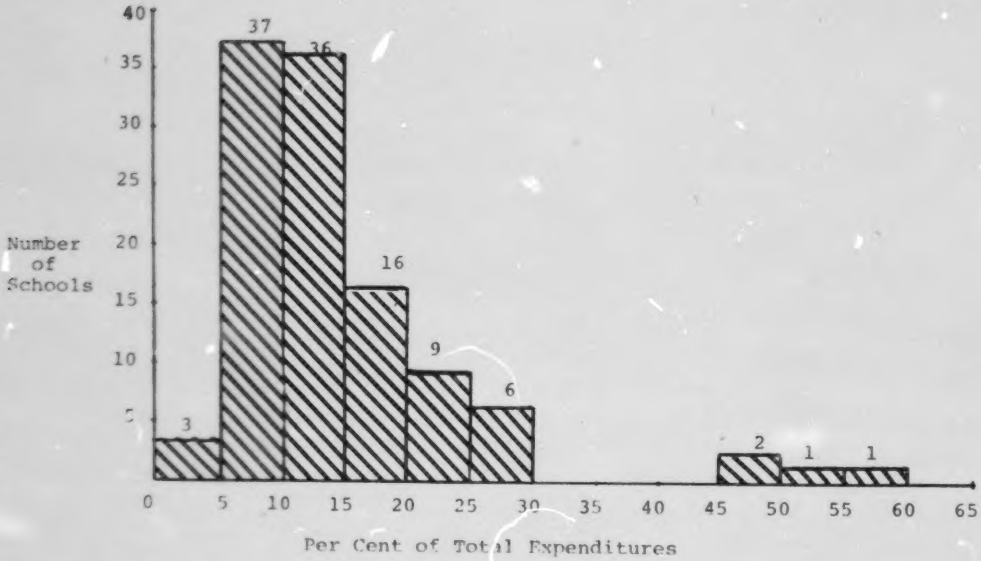

FIGURE 3c

PERCENT OF MEDICAL SCHOOL EXPENDITURES DEVOTED TO
SPONSORED TEACHING AND TRAINING

Data Source: INC023

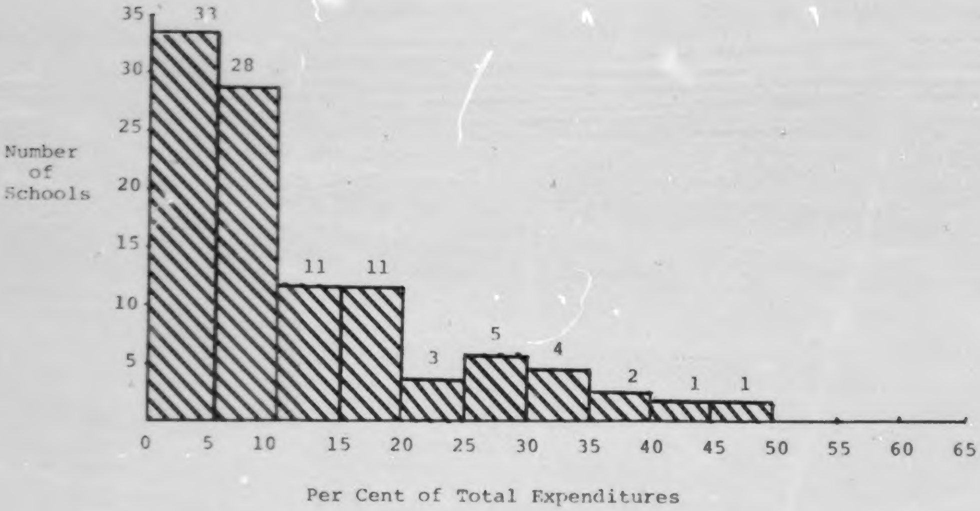

FIGURE 3d

PERCENT OF MEDICAL SCHOOL EXPENDITURES DEVOTED TO
SPONSORED MULTI-PURPOSE AND SERVICE PROGRAMS

Data Source: INC024

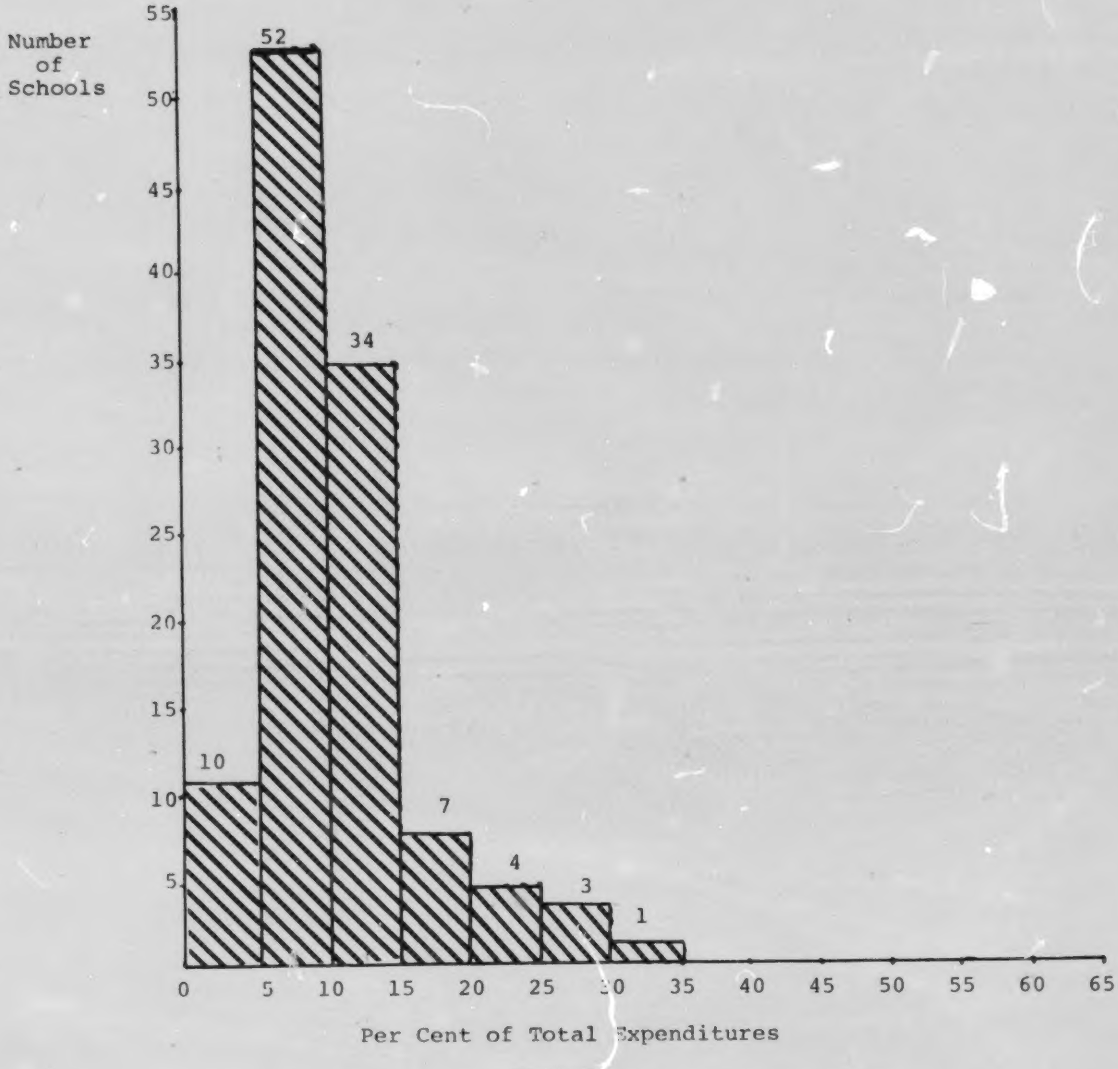

FIGURE 3e

PERCENT OF MEDICAL SCHOOL EXPENDITURES DEVOTED TO ADMINISTRATION AND GENERAL EXPENSES

Data Source: INC026

of their expenditures to medical instruction and departmental research and a smaller group of 29 medical schools had between 35 and 50 percent of their expenditures in this area. In other categories the concentrations were more pronounced: 62 schools devoted between 5 and 25 percent of their expenditures to sponsored research; 73 schools devoted between 5 and 15 percent of their expenditures to sponsored teaching and training programs; 61 schools devoted less than 10 percent of their expenditures to sponsored multi-purpose and service programs; and 86 schools devoted between 5 and 15 percent of their expenditures to administrative and general expenses.

Another context from which the expenditures of medical schools may be viewed is the amount of expenditures a school reported per medical student and per faculty member. These data are presented in Table 10. When expenditures per medical student are considered, during 1974-75 medical schools spent from less than $15,000 to more than $145,000 per student. Fifty-one medical schools spent between $25,000 and $55,000, and the mean expenditure per student was almost $57,000. These numbers may be better gross indicators of the relative resources of medical schools than total expenditures, which do not take the number of students supported by the school into consideration. However, the expenditures of a medical school support a wide variety of programs, including research, patient care, and related programs, as well as the instruction of medical students.

Expenditures per faculty member, on the other hand, ranged from less than $15,000 to more than $225,000. From the information presented in Table 10, it can be seen that schools were much more spread out in terms of the amount of money expended per faculty member than in the amount expended per medical student. However, 22 schools reported spending between $80,000 and $90,000 per faculty member, and the mean expenditure per faculty member was almost $85,000.

Sponsored Research Funding

One of the most significant areas of expenditures for medical schools, both public and private, is sponsored research. Figure 4 shows the average percentage of this funding coming from various sources. The preponderance -- 79.6 percent -- of sponsored research funding that medical schools receive comes from the federal government. Among the sources from which medical schools receive sponsored research funding, 63 percent of the sponsored research funding in 1974-75 came from the National Institutes of Health, 5 percent from other Department of Health, Education and Welfare agencies, 1.9 percent from the National Science Foundation,

TABLE 10

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY DOLLARS EXPENDED
PER MEDICAL STUDENT AND PER FULL-TIME FACULTY MEMBER, 1974-75

Dollars	Expenditures per Medical Student	Expenditures per Full-Time Faculty Member
Less than 15000	2*	1
15000 - 20000	5	0
20000 - 25000	4	0
25000 - 30000	11	0
30000 - 35000	10	2
35000 - 40000	10	3
40000 - 45000	2	1
45000 - 50000	8	6
50000 - 55000	10	5
55000 - 60000	5	1
60000 - 65000	9	8
65000 - 70000	4	8
70000 - 75000	4	6
75000 - 80000	4	4
80000 - 85000	4	10
85000 - 90000	1	12
90000 - 95000	3	7
95000 - 100000	2	9
100000 - 105000	1	6
105000 - 110000	2	4
110000 - 115000	3	1
115000 - 120000	0	5
120000 - 125000	1	4
125000 - 130000	2	1
130000 - 135000	0	2
135000 - 140000	2	2
140000 - 145000	0	1
145000 - 150000	1	0
:	:	:
225000 - 230000	0	1
Missing	4	4
Total	114	114
Median	52,086.50	85,042.56
Mean	56,879.37	84,717.69

*The numbers in each column represent the number of schools in each interval.

Data Source: INC034, INC036

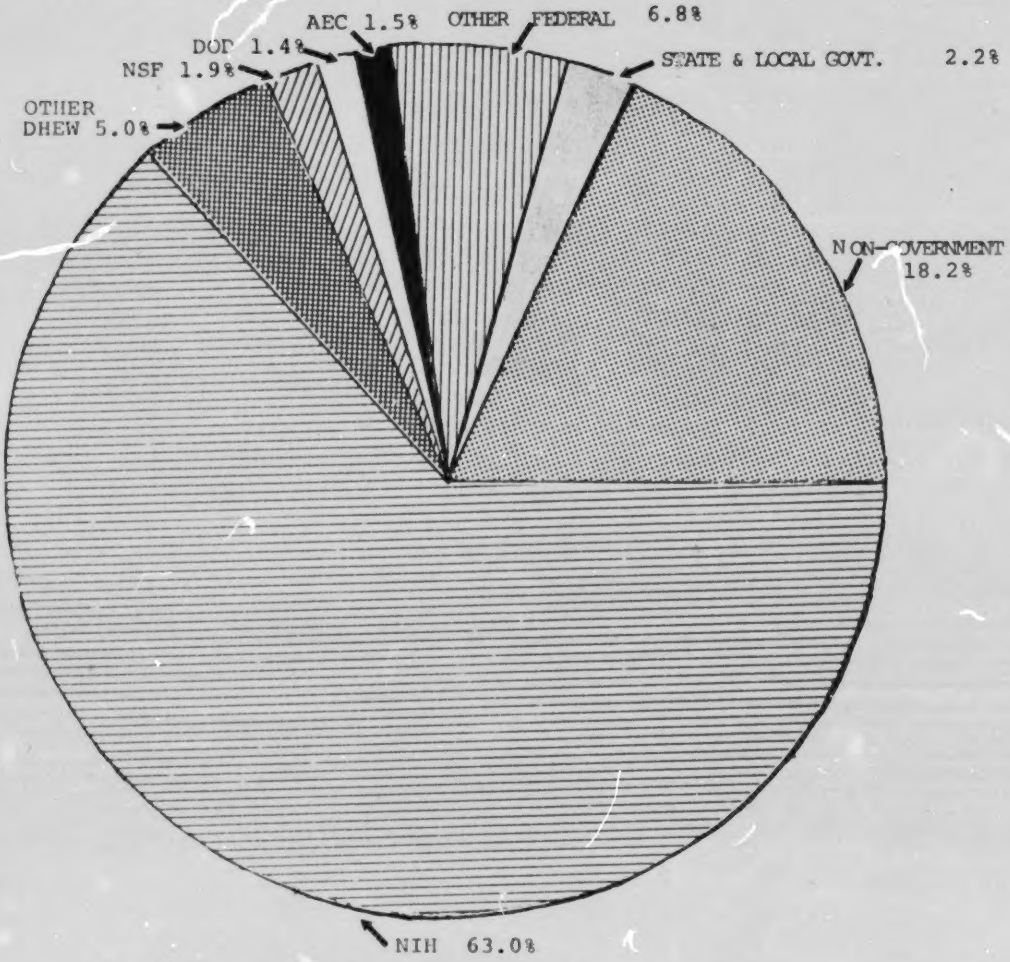

FIGURE 4

SOURCES OF SPONSORED RESEARCH REVENUE
FOR ALL U.S. MEDICAL SCHOOLS
1974-75

Data Source: Percentages computed from VAR192, VAR193, VAR194, VAR195, VAR231, VAR232, VAR233, VAR234, VAR235, VAR236.

1.5 percent from the Atomic Energy Commission, and 1.4 percent from the Department of Defense. Other federal agencies, not specified in Part I of the 1974-75 LCME questionnaire, were responsible for 6.8 percent of the total sponsored research funding. Non-federal sources of sponsored research funding included non-government sources such as alumni, business and industry, and private foundations, which provided 18.2 percent of sponsored research funding in 1974-75; and state and local governments, which provided 2.2 percent of the sponsored research funding.

As stated above, the major single source of sponsored research support to medical schools during the 1974-75 year was the National Institutes of Health (NIH). The responsibility for keeping track of the research grants awarded by NIH and a few related agencies rests with the Division of Research Grants (DRG). NIH receives many different kinds of grant proposals from medical schools ranging from relatively small research grant proposals, which are usually submitted by a faculty member, to major institutional program project grant proposals. The most frequent applications are for the single investigator initiated research (R01) grants. In Table 11, the distribution of medical schools by the number of R01 applications and the total number of applications in selected categories are presented.* The number of R01 applications submitted by medical schools ranged from less than 5 to more than 115,

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* The data on NIH grant awards to medical schools was gathered in the course of a cooperative research effort by AAMC and NIH, and "Total Applications" was defined for the purposes of that study as DRG's IMPAC file records having the following activity codes:

R01: Project Grants
R07: International Centers for Medical Research
R10: Cooperative Clinical Research, Chemotherapy and Psychopharmocology Research Grants
R13: Conferences
R18: Research Demonstration and Dissemination Projects
R22: U.S. - Japan Cooperation Medical Science Program
R23: Special Research Award Program
R25: Education Projects
R26: National Organ Site Projects
P01: Research Program Projects
P60: Research and Demonstration Centers (formally P15)
P17: Specialized Centers of Research
P50: Specialized Centers

It is acknowledged that these categories are a subset of those in which medical schools may have submitted applications and received awards. However, more complete data were not available in IPS at the time this report was prepared.

TABLE 11

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY NUMBER OF R01 AND "TOTAL" GRANT APPLICATIONS SUBMITTED, 1974-75

Number of Applications	Number of Schools	
	R01	"Total"*
Fewer than 5	3	2
6 - 10	13	8
11 - 15	5	9
16 - 20	11	2
21 - 25	9	3
26 - 30	6	12
31 - 35	12	6
36 - 40	9	5
41 - 45	4	7
46 - 50	5	8
51 - 55	4	7
56 - 60	5	2
61 - 65	4	4
66 - 70	4	4
71 - 75	3	6
76 - 80	5	4
81 - 85	2	4
86 - 90	2	1
91 - 95	0	4
96 - 100	0	3
101 - 105	1	2
106 - 110	0	2
111 - 115	1	0
116 - 120	1	0
121 - 125		0
126 - 130		0
131 - 135		2
136 - 140		0
141 - 145		0
146 - 150		1
Missing	5	6
Total	114	114
Mean	38.6	49.8

*"Total" applications refers to those from categories described on page 34.

Data Source: VAR383, "Total" applications was computed from VAR340 and VAR341.

with an average of approximately 39 applications per school. The number of applications in the categories included in "Total" ranged from less than 5 to almost 150. The average number of "Total" applications submitted was approximately 50.

The applications submitted to NIH and the other agencies for whom records are maintained by DRG are reviewed for scientific merit by Initial Review Groups (IRG's). The IRG's either approve or disapprove the applications, and each application which is approved by an IRG is assigned a "priority score", which in effect determines the ranking of the applications in each competition in terms of scientific merit. Funds are then awarded on the basis of the availability of money, the funding priority of the competition in which the application was submitted, and the relative scientific merit of the applications.

Table 12 presents the distribution of medical schools with respect to the number of R01 and "Total" applications approved by the Initial Review Groups. The schools received approval from the Initial Review Groups for from less than 5 to more than 90 R01 applications, and from less than 5 to more than 110 "Total" applications. The average number of R01 and "Total" applications approved were 29 and 38, respectively.

The distribution of medical schools by the percentage of R01 and "Total" grant applications approved by Initial Review Groups is presented in Table 13. When the percent of R01 applications approved is considered, in 1974-75 medical schools ranged from having less than 5 percent to having all of their R01 applications approved. However, 78 medical schools had between 61 and 85 percent of the R01 applications which they submitted to agencies for which DRG maintains records approved by the Initial Review Group, and the mean percentage of grants approved was 73 percent. The percentages of "Total" grant applications submitted to NIH approved by the Initial Review Groups is similar. Although medical schools' approval rates ranged from about 30 to 100 percent, 74 medical schools had between 66 and 85 percent of the "Total" proposals they submitted to NIH and related agencies approved by the Initial Review Groups and the mean approval rate for "Total" applications was 74 percent.

TABLE 12

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY THE NUMBER OF R01 AND "TOTAL"* APPLICATIONS APPROVED BY INITIAL REVIEW GROUPS, 1974-75

Number of Applications Approved	Number of Schools	
	R01	"Total"*
Fewer than 5	10	5
6 - 10	10	10
11 - 15	13	6
16 - 20	13	10
21 - 25	13	9
26 - 30	6	12
31 - 35	9	7
36 - 40	6	6
41 - 45	6	8
46 - 50	2	5
51 - 55	5	4
56 - 60	5	4
61 - 65	5	4
66 - 70	3	5
71 - 75	0	2
76 - 80	0	4
81 - 85	1	3
86 - 90	0	1
91 - 95	2	0
96 - 100		0
101 - 105		0
106 - 110		2
111 - 115		1
Missing	5	6
Total	114	114
Mean	29.2	37.8

*"Total" applications refers to those from categories described on page 34.

Data Source: VAR384, VAR340

TABLE 13

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY PERCENT OF R01 AND "TOTAL" APPLICATIONS APPROVED BY NIH INITIAL REVIEW GROUPS, 1974-75

Percentage of Applications Approved	Number of Schools	
	R01	"Total"
Less than 5	2	0
6 - 10	0	0
11 - 15	0	0
16 - 20	0	0
21 - 25	1	0
26 - 30	0	0
31 - 35	1	1
36 - 40	0	0
41 - 45	1	0
46 - 50	3	4
51 - 55	2	0
56 - 60	5	9
61 - 65	12	6
66 - 70	19	14
71 - 75	8	21
76 - 80	23	18
81 - 85	16	21
86 - 90	9	8
91 - 95	1	2
96 - 100	6	4
Missing	5	6
Total	114	114
Mean	72.8	74.0

Data Source: VAR341, INC045.

Table 14 presents the distributions of medical schools by dollars awarded for R01 grants and for "Total" grants.* U.S. medical schools were awarded from less than $250,000 to almost $2 million from R01 applications. The average amount awarded per medical school was almost $500,000. In terms of dollars awarded in the "Total" categories, the range was from less than $250,000 to almost $7 million, with a mean of slightly over $1.5 million per medical school.

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* The figures in Table 14 reflect the funds provided in grants actually awarded to medical schools, not the funds in applications approved by Initial Review Groups.

TABLE 14

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY DOLLAR AMOUNTS OF R01 AND "TOTAL"* GRANTS AWARDED, 1974-75

Dollars Awarded (in thousands)	Number of Schools	
	R01 Grants	"Total"* Grants
Less Than 250	41	16
250 - 500	21	13
500 - 750	23	6
750 - 1,000	7	15
1,000 - 1,250	10	9
1,250 - 1,500	4	9
1,500 - 1,750	0	2
1,750 - 2,000	2	7
2,000 - 2,250		3
2,250 - 2,500		3
2,500 - 3,000		6
3,000 - 3,500		6
3,500 - 4,000		4
4,000 - 4,500		2
4,500 - 5,000		2
5,000 - 6,000		3
6,000 - 7,000		2
Missing	6	6
Total	114	114
Mean	$492,975	$1,615,202

*"Total" refers to grants awarded in categories described on page 34.

Data Source: VAR386, VAR339

C. Clinical Facilities

An aspect of medical education that has drawn attention from people concerned with health care delivery as well as those concerned with the training of medical students is the utilization of clinical facilities for medical education. Some medical schools own their own clinical facilities, while others have affiliations with clinical facilities in the community. The clinical affiliations may be broken down into one of the following three types: (1) major affiliations, in which clinical facilities are used for both undergraduate and graduate medical education; (2) limited affiliations, in which facilities are used only for undergraduate medical education; and (3) graduate affiliations, in which facilities are used only for graduate medical education.

Table 15 presents the distributions of medical schools with respect to the number of clinical facilities owned and the number of each kind of affiliated clinical faciliites. In 1974-75, slightly fewer than half of the medical schools, 52 out of 111, did not own clinical facilities. Of those who did own their own facilities, almost all, 53 of 59, owned one or two facilities. The most common form of affiliation is a major clinical affiliation between a medical school and a hospital. Seventy-eight of the medical schools in the United States had major affiliations for clinical education with between 1 and 6 hospitals. The average number of major clinical affiliations per medical school was 5.2. Medical schools also reported having limited affiliations or graduate medical education affiliations with varying numbers of hospitals. The schools had an average of approximately 4 limited clinical affiliations and 2 graduate affiliations, although the latter figure may be somewhat misleading because 60 of the medical schools reported no graduate clinical affiliations. In terms of the total number of clinical facilities available for medical education, both owned and affiliated, medical schools range from having 2 to 58 facilities. Most of the schools, 82, had between 3 and 14 clinical facilities, and the average number of clinical facilities was 12 per medical school.

The number of beds in owned and affiliated clinical facilities (and therefore potentially available for medical education through undergraduate clinical clerkships or residency training) is another way of looking at the picture of clinical facilities of medical schools. The distributions of medical schools by the number of beds in owned, affiliated,

TABLE 15

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY NUMBER OF OWNED, AFFILIATED AND TOTAL CLINICAL FACILITIES, 1974-75

		Type of Affiliation			
Number of Clinical Facilities	Owned	Major	Limited	Graduate	Total
0	52*	3	18	60	0
1 - 2	53	21	33	24	1
3 - 4	5	31	28	11	11
5 - 6	0	26	14	7	17
7 - 8	1	19	6	2	12
9 - 10		4	3	1	15
11 - 12		2	4	2	15
13 - 14		2	2	2	12
15 - 16		1	0	1	7
17 - 18		0	2	0	4
19 - 20		1	0	0	4
21 - 22		0	0	1	6
23 - 25		1	0		2
26 - 30			0		3
31 - 35			0		1
36 - 40			1		0
41 - 45					0
46 - 50					0
51 - 55					0
56 - 60					1
Missing	3	3	3	3	3
Total	114	114	114	114	114
Mean	.74	5.12	3.96	2.01	11.82

*Numbers in each column are the number of medical schools having a given number of facilities of that type.

Data Source: VAR242, VAR243, VAR244, VAR245, INC035.

and all clinical facilities are presented in Table 16. In this table, it can be seen that the overwhelming majority of beds potentially available for medical education are in affiliated clinical facilities. The total number of beds in owned and affiliated clinical facilities ranged from less than 400 to more than 12,000. The mean number of beds available for clinical education in 1974-75 was approximately 4,440.

The number of beds available for clinical education is put in another context by Figure 5, which depicts the number of beds available per undergraduate medical student. From Figure 5, it is apparent that medical schools have potential access to from fewer than 2 to more than 60 beds per medical student in owned and affiliated clinical facilities. Most of the medical schools, however, have somewhere between 4 and 14 beds available per student in their facilities.

A final aspect of clinical facilities which is important to the clinical training of medical students is the number of outpatient visits made to clinical facilities owned by or affiliated with medical schools. This information was available for 76 medical schools in 1974-75, and is presented in Table 17. The visits recorded in Table 17 include the provision of mental health treatment, routine laboratory analyses, and other visits not directly related to medical education.* The number of outpatient visits to medical school-related clinical facilities in 1974-75 ranged from fewer than 100,000 to over 2 million. The average number of outpatient visits to facilities related to a single school was 716,234. It is interesting to note in Table 17, however, that there is no concentration of schools with respect to the number of outpatient visits made to school-related clinical facilities during the year; rather, the medical schools are fairly uniformly distributed from fewer than 100,000 outpatient visits per year to 2,000,000 visits or more. This particular measure represents an example of the diversity of medical schools in the U.S. No single number of outpatient visits to medical school-related facilities would be likely to be representative of the situation in any particular medical school.

It should be noted that the number of beds available and the number of outpatient visits recorded are broad descriptors of clinical facilities associated with medical schools. The number of beds available and the number of outpatient visits

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* A more exhaustive treatment of the role of outpatient visits in medical education may be found in the Study of Ambulatory Care Facilities as a Resource for Medical Education (Agro, 1977).

TABLE 16

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY NUMBER OF BEDS
IN OWNED AND AFFILIATED CLINICAL FACILITIES, 1974-75

	Number of Schools		
Number of Beds	Owned Clinical Facilities	Affiliated Clinical Facilities	Total
0	50	0	0
0 - 399	10	1	1
400 - 799	32	2	0
800 - 199	8	3	3
1,200 - 1,599	2	6	5
1,600 - 1,999		6	3
2,000 - 2,399		9	10
2,400 - 2,799		8	6
2,800 - 3,199		10	7
3,200 - 3,599		5	10
3,600 - 3,999		5	7
4,000 - 4,399		4	2
4,400 - 4,799		5	5
4,800 - 5,199		3	3
5,200 - 5,599		1	4
5,600 - 5,999		6	2
6,000 - 6,399		2	2
6,400 - 6,799		2	6
6,800 - 7,199		0	0
7,200 - 7,599		3	2
7,600 - 7,999		0	0
8,000 - 8,399		1	1
8,400 - 8,799		1	2
8,800 - 9,199		1	0
9,200 - 9,599		4	1
9,600 - 9,999		1	4
10,000 - 10,399		1	1
10,400 - 10,799		0	1
10,800 - 11,199		0	0
11,200 - 11,599		1	0
11,600 11,999		1	1
12,000 - 12,399			1
Missing	12	22	24
Total	114	114	114
Mean	302.93	4127.54	4438.54

Data Source: VAR246, VAR247, VAR248

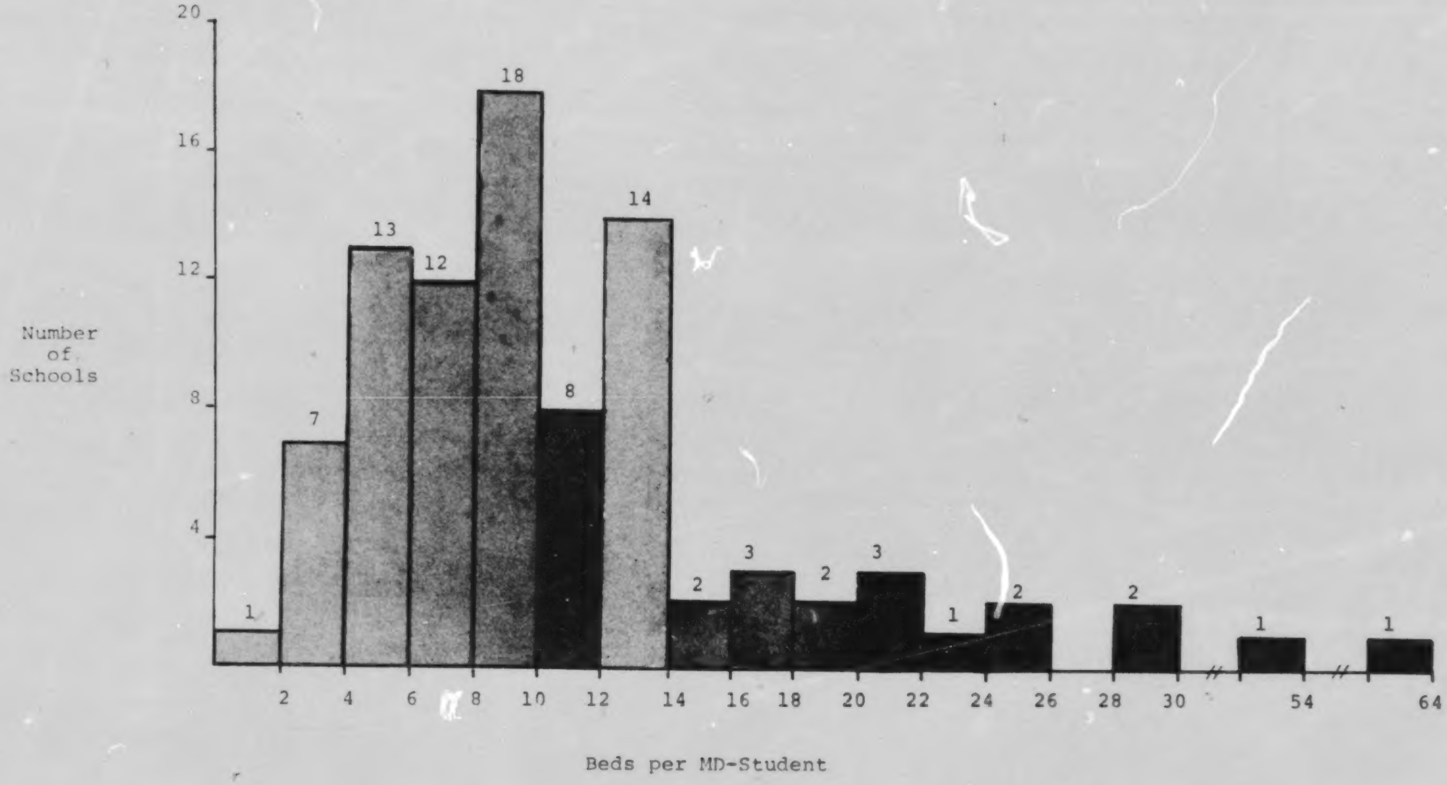

FIGURE 5

THE DISTRIBUTION OF MEDICAL SCHOOLS BY THE NUMBER OF BEDS PER MEDICAL STUDENT IN OWNED AND AFFILIATED CLINICAL FACILITIES 1974-75

Data Source: INC038

TABLE 17

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY NUMBER OF OUTPATIENT VISITS TO OWNED AND AFFILIATED CLINICAL FACILITIES, 1974-75

Thousands of Visits	Number of Schools
Fewer than 100	5
100 - 200	8
200 - 300	10
300 - 400	8
400 - 500	6
500 - 600	7
600 - 700	4
700 - 800	4
800 - 900	0
900 - 1,000	2
1,000 - 1,100	4
1,100 - 1,200	1
1,200 - 1,300	0
1,300 - 1,400	5
1,400 - 1,500	4
1,500 - 1,600	2
1,600 - 1,700	1
1,700 - 1,800	0
1,800 - 1,900	1
1,900 - 2,000	1
Over 2,000	3
Missing	38
Total	11[illegible]
Mean	716,234

Data Source: VAR251

recorded are not necessarily reflective of the utilization of facilities for the purposes of undergraduate medical education, since a proportion of these visits may not involve the educational function of the school. The description of utilization of facilities for these purposes is, of course, of great interest, but it could not be made with the data available.

D. Medical Students

The following section of this report will focus on institutional measures of students in the following categories: applicants to medical school; undergraduate medical students (students enrolled in MD-degree programs); other students, including graduate medical students (interns and residents), graduate students in the basic sciences, and students in health-related programs for which medical school faculty have teaching responsibility; and the alumni of medical schools. The Division of Student Studies of the Association produces a number of annual reports of characteristics of medical students in these areas, but those studies tend to be focused on aggregated information for all students rather than on institutional measures.

Applicants. The number and characteristics of all applicants to medical school are presented elsewhere (Dubé and Johnson, 1976b). However, many would-be physicians apply for admission to more than one school. The institutional perspective of applicant characteristics is presented in this report. Table 18 presents the distribution of medical schools with respect to the number of students applying for admission. The schools received from fewer than 250 to more than 9,000 applications. These extreme values appear to be unrepresentative of medical schools in general since 93 medical schools received between 750 and 5,500 applications for first-year positions in 1974-75. The average number of applications was 3,175 per medical school.

Tables 19 and 20 allow for the examination of four selected groups of applicants to medical schools. The groups for which information is presented are females, under-represented minorities (Afro-Americans, American Indians, Mexican-Americans, and mainland Puerto Ricans), in-state applicants, and foreign applicants (those from countries other than the U.S. or Canada). Table 19 presents the distribution of medical schools by frequency of applications from the four groups. The number of applications from female applicants ranged from fewer than 100 to over 2,200, the number from under-represented minority applicants from fewer than 100 to over 1,300, the number from in-state applicants from fewer than 100 to more than 3,000, and the number from foreign

TABLE 18

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY NUMBER OF APPLICANTS, 1974-75

Number of Applicants	Number of Schools
Fewer than 250	2
250 - 500	5
500 - 750	0
750 - 1,000	8
1,000 - 1,250	7
1,250 - 1,500	6
1,500 - 1,750	8
1,750 - 2,000	10
2,000 - 2,250	4
2,250 - 2,500	6
2,500 - 2,750	4
2,750 - 3,000	2
3,000 - 3,250	1
3,250 - 3,500	6
3,500 - 3,750	2
3,750 - 4,000	5
4,000 - 4,250	4
4,250 - 4,500	5
4,500 - 4,750	4
4,750 - 5,000	6
5,000 - 5,250	2
5,250 - 5,500	3
5,500 - 5,750	1
5,750 - 6,000	0
6,000 - 6,250	2
6,250 - 6,500	1
6,500 - 6,750	2
6,750 - 7,000	0
7,000 - 7,250	0
7,250 - 7,500	0
7,500 - 7,750	2
7,750 - 8,000	0
8,000 - 8,250	1
8,250 - 8,500	2
8,500 - 8,750	2
8,750 - 9,000	0
9,000 - 9,250	1
Missing	0
Total	114
Mean	3,174.4

Data Source: VAR109.

TABLE 19

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY NUMBER OF APPLICATIONS FROM SELECTED GROUPS OF APPLICANTS, 1974-75

	Number of Schools			
Number	Female	Under-represented Minority	In-State	Foreign
Fewer than 100	7	37	5	62
100 - 200	13	36	9	31
200 - 300	13	17	5	13
300 - 400	12	13	9	5
400 - 500	9	6	11	1
500 - 600	8	2	7	
600 - 700	5	0	9	
700 - 800	5	0	5	
800 - 900	11	1	3	
900 - 1,000	6	0	1	
1,000 - 1,100	5	0	6	
1,100 - 1,200	5	0	1	
1,200 - 1,300	5	0	1	
1,300 - 1,400	3	1	4	
1,400 - 1,500	2		1	
1,500 - 1,600	0		5	
1,600 - 1,700	3		8	
1,700 - 1,800	1		3	
1,800 - 1,900	0		2	
1,900 - 2,000	0		3	
2,000 - 2,100	0		2	
2,100 - 2,200	0		0	
2,200 - 2,300	1		1	
2,300 - 2,400			0	
2,400 - 2,500			2	
2,500 - 2,600			0	
2,600 - 2,700			2	
2,700 - 2,800			3	
2,800 - 2,900			1	
2,900 - 3,000			0	
More than 3,000			4	
Missing	0	1	1	2
Total	114	114	114	114
Mean	643.25	197.21	1,068.99	111.33

Data Source: VAR110, VAR110, VAR111, VAR113, VAR114, VAR117, VAR115.

applicants from fewer than 100 to almost 500. There was an average of 643 applications from female applicants, 197 from under-represented minority applicants, 1,069 from in-state applicants, and 111 from foreign applicants in the pool of applications for each medical school.

The relation of these groups to the entire medical school applicant pool can be seen more fully in Table 20, in which the distribution of schools by the percentage of applicants from the four groups in Table 19 is presented. Generally, females make up between 12 and 28 percent of a medical school's applicants (an average of 20 percent), under represented minority applicants represent less than 12 percent (an average of 6.5 percent), and foreign applicants usually constitute 8 percent or less of the applicant pool (with a mean of 3.4 percent). Only with respect to the percent of in-state applicants in the total number of applicants applying to a given school was there great variability among the schools. From the data presented in Table 20 it is apparent that as groups, females, minority, and foreign applicants generally make up a small proportion of the applicants to medical school.

The ratio of applications to a given school to the number of first year medical students the school enrolls is presented in Table 21. From the data in Table 21, it is apparent that there is a great deal of variability in the ratio of number of applicants per first year position in medical school. A distinction needs to be drawn between the number of applicants to medical school in a given year, and the number of applications to a given school in that year. According to Dubé and Johnson (1976a), in 1974-75 there were 42,624 applicants for 15,066 positions in the first year classes of medical schools in the United States, a ratio of 2.83 applicants per position. However, the 42,624 applicants completed a total of 362,376 applications to medical school, or 8.5 applications per applicant. The medical schools, as a result of multiple applications, did not see 3 applicants per position but rather from fewer than 3 applications per position to over 70 applications per position. With the exception of two schools, however, the medical schools received 60 applications per position or fewer, and the average number of applications per position was 25.9.

TABLE 20

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY THE PERCENT OF APPLICANTS FROM SELECTED GROUPS, 1974-75

	Number of Schools			
Percent	Female	Under-represented Minority	In-State	Foreign
Less than 4	0	29	7	83
4- 8	0	52	7	28
8-12	1	14	2	1
12-16	16	6	8	1
16-20	42	1	2	
20-24	40	0	6	
24-28	11	1	6	
28-32	2	1	2	
32-36	1		8	
36-40	0		9	
40-44	1		13	
44-48			5	
48-52			3	
52-56			4	
56-60			8	
60-64			2	
64-68			5	
68-72			6	
72-76			1	
76-80			3	
80-84			1	
84-88			4	
88-92			1	
Missing	0	10	1	1
Total	114	114	114	114
Mean	19.87	6.64	39.74	3.37

Data Source: STC091, STC090, STC092, STC093.

TABLE 21

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY RATIO OF THE NUMBER OF APPLICANTS PER FIRST YEAR MEDICAL STUDENT, 1974-75

Ratio	Number of Schools
Less than 4	3
4 - 8	11
8 - 12	16
12 - 16	8
16 - 20	11
20 - 24	11
24 - 28	8
28 - 32	7
32 - 36	5
36 - 40	8
40 - 44	11
44 - 48	2
48 - 52	3
52 - 56	3
56 - 60	5
60 - 64	1
64 - 68	0
68 - 72	0
72 - 76	1
Missing	0
Total	114
Mean	25.94

Data Source: STC084

The ratio of applications per position for females, males, and under-represented minority applicants are presented in Table 22. These ratios are defined as the number of applications a medical school received from the members of the group, divided by the number of first year positions which were filled by members of the group. For each of the three groups there was a wide variety in the ratios of applications per position among medical schools. However, in each case a number of schools were concentrated between 5 and 25 applicants per position, and the average numbers of applications per position for the three groups were similar. In fact, in terms of competition for available positions in a given school, males on the average found it slightly more difficult to get into medical school than did females or minority students.

Undergraduate Medical Students. In this section brief consideration is given to the characteristics of students enrolled in medical schools in the United States in 1974-75. The data presented in the section of the report are mainly reported by the medical schools on the 1974-75 Liaison Committee on Medical Education (LCME) Questionnaire -- Part II. These figures are reported in the form of national aggregates in the Journal of the American Medical Association (JAMA) Education Issue of 1975 (see Crowley, 1975). However, this report examines similarities and differences among U.S. medical schools in terms of the characteristics of the medical students enrolled in them.

Table 23, the first table in this section, presents the distribution of U.S. medical schools in terms of the number of males, females, and total students in the first year of medical school, the final year of medical school, and all years of medical school. As can be seen in Table 23, the medical schools are fairly widely dispersed in terms of the number of male students enrolled in the first, final, and all years. The number of females, on the other hand, is fairly constant, and consistently much lower than the number of males. However, the increase in the number of females enrolled between the first year (1974-75) and the final year (which represents first year enrollment in 1971-72 or 1972-73, depending on whether the school has a three year or four year curriculum) is marked. The mean number of first year females (29.5) is almost double the mean number of females in the final year. In the same period the mean number of males has risen from 96.6 to 101.9, approximately a five percent increase. Overall, in 1974-75 there were fewer than 100 medical students enrolled in each of the smallest of the 114 medical schools for which enrollment was reported, and

TABLE 22

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY APPLICANT PER FIRST-YEAR MEDICAL STUDENT IN SPECIFIC GROUPS, 1974-75

	Number of Schools		
Ratio	Female	Male	Underrepresented Minority
0- 5	6	7	4
5- 10	23	16	13
10- 15	13	12	21
15- 20	19	10	19
20- 25	13	14	11
25- 30	8	8	18
30- 35	3	8	5
35- 40	14	9	5
40- 45	6	9	2
45- 50	1	9	2
50- 55	2	3	0
55- 60	1	2	3
60- 65	0	3	3
65- 70	2	2	0
70- 75	0	0	0
75- 80	2	1	0
80- 85	1	0	0
85- 90		0	0
90- 95		0	0
95-100		0	1
100-105		0	0
105-110		0	0
110-115		0	0
115-120		0	0
120-125		0	0
125-130		0	0
130-135		0	1
Missing	0	1	6
Total	114	114	114
Mean	23.41	27.82	23.58

Data Source: STC085, STC086, STC087.

TABLE 23

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY ENROLLMENTS IN FIRST YEAR, FINAL YEAR, AND ALL YEARS OF MEDICAL SCHOOL, 1974-75

Number of Students	First Year Male	 Female	 Total	Final Year Male	 Female	 Total	All Years Male	 Female	 Total
Less than 50	12*	105	7	23	112	20	2	24	
50 - 99	49	9	27	40	2	27	3	52	3
100 - 149	38		43	34		46	10	28	6
150 - 199	10		23	10		7	5	9	8
200 - 249	2		9	7		12	8	1	2
250 - 299	3		2			2	6		8
300 - 349			3				10		5
350 - 399							14		7
400 - 449							18		10
450 - 499							10		15
500 - 549							11		9
550 - 599							5		14
600 - 699							5		14
700 - 799							3		4
800 - 899							2		4
900 - 999							2		2
1000 - 1099									1
1100 - 1199									2
Total	114	114	114	114	114	114	114	114	114

	Mean	Median
First Year Male	101.9	95.5
First Year Female	29.5	28.0
First Year Total	131.4	122.5
Final Year Male	96.6	92.0
Final Year Female	15.0	13.5
Final Year Total	111.5	106.5
All Years Male	388.5	393.5
All Years Female	85.8	82.0
All Years Total	474.4	479.0

*Numbers in each column represent the number of schools falling in each interval.

Data Source: VAR008, VAR009, VAR010, VAR011, VAR012, VAR013, VAR014, VAR015, VAR016.

over 1,100 medical students in the largest medical school. There was an average of 474.4 medical students per medical school in the United States.

Tables 24 and 25 present the distribution of medical schools with respect to first year medical students in more detail. Table 24 presents data for first year medical students from four groups -- (1) females, (2) under-represented minority students, (3) students who are residents of the state in which the medical school is located, and (4) foreign (non U.S.-Canadian citizens) medical students. There were from fewer than 10 to about 80 female first year medical students enrolled in a single medical school. All but two medical schools enrolled fewer than 30 under-represented minority medical students in their first year classes, and all but 3 schools enrolled 10 or fewer foreign medical students. The only one of the four groups in which medical schools showed much variation was the enrollment of in-state medical students, which ranged from fewer than 10 to more than 300 students. In terms of average numbers of students enrolled by medical schools from these four groups, there was an average of 98 in-state, 30 female, 12 under-represented minority, and 3 foreign first-year medical students.

Table 25 shows the number of first year medical students from the four groups described above in the perspective of their relationship to the size of the first year class in each medical school. Almost all of the medical schools enrolled between 10 and 30 percent female first year medical students in 1974-75, less than 20 percent under-represented minority students, and less than 10 percent foreign medical students. The schools enrolled from less than 5 to 100 percent in-state first year medical students (those from the state in which the school is located). Many public schools are required to fill all or most of their first-year class with students who are residents of the state in which the school is located, and some private schools receive financial inducements from state government to accept state residents. These policies vary widely from state to state, and account for the great variability in the percentage of in-state first year medical students. The average medical school's first year medical student class would have consisted of 23 percent female students, 9.5 percent under-represented minority students, 74.6 percent in-state students, and 2.4 percent foreign students.

TABLE 24

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY NUMBER OF FEMALE, UNDERREPRESENTED MINORITY, IN-STATE, AND FOREIGN FIRST YEAR MEDICAL STUDENTS ENROLLED, 1974-75

	Number of Schools			
Number of First Year Medical Students	Female	Underrepresented Minority	In-State	Foreign
Fewer than 10	5	58	2	79
10-20	27	30	6	3
20-30	34	12	2	
30-40	26	0	10	
40-50	14	0	8	
50-60	5	0	3	
60-70	2	0	16	
70-80	1	0	3	
80-90		1	9	
90-100		1	7	
100-110			5	
110-120			5	
120-130			10	
130-140			2	
140-150			5	
150-160			3	
160-170			4	
170-180			2	
180-190			0	
190-200			0	
200-210			3	
210-220			1	
220-230			2	
230-240			0	
240-250			1	
250-260			1	
260-270			0	
270-280			0	
280-290			0	
290-300			1	
300-310			0	
310-320			0	
320-330			1	
Missing	0	12	2	32
Total	114	114	114	114
Mean	29.49	12.49	98.03	2.79

Data Source: VAR009, VAR095, VAR096, VAR098, VAR099, VAR045, VAR017.

TABLE 25

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY PERCENTAGE OF FEMALE, MINORITY, IN-STATE, AND FOREIGN FIRST-YEAR MEDICAL STUDENTS ENROLLED, 1974-75

	Number of Schools			
Percent	Female	Underrepresented Minority	In-State	Foreign
Less than 5	0	32	1	72
5-10	1	43	1	9
10-15	10	12	4	1
15-20	31	8	2	
20-25	34	4	0	
25-30	25	1	4	
30-35	9	0	4	
35-40	1	0	2	
40-45	1	0	1	
45-50	0	0	4	
50-55	0	0	3	
55-60	1	0	3	
60-65	0	0	4	
65-70	0	2	3	
70-75	1		6	
75-80			2	
80-85			8	
85-90			11	
90-95			19	
95-100			30	
Missing	0	12	2	32
Total	114	114	114	114
Mean	3.03	9.50	74.58	2.43

Data Source: ST 001, STC082, STC029, STC008.

Further documentation of the number and percentage of in-state and non-resident medical students in the central 50 percent of medical schools, both in the first year and total, is presented in Table 26. From this table it can be seen that there is a great deal of variety in both the number and percentage of medical students from the state in which the school is located. The number of in-state medical students in the middle 50 percent of medical schools ranged from 159 to 490, while the number of first year medical students in that category ranged from 50 to 126. For non-resident medical students in the middle 50 percent of medical schools the ranges were 3 to 50 for first year students and 14 to 182 for all medical students. In Table 26, it is further evident that 25 percent of the medical schools in the U.S. (those above the 75th percentile) had undergraduate student bodies in which 95 percent or more of the medical students were residents of the state in which the school is located. This finding is, again, a reflection of the requirement placed on many state schools to enroll students who are residents of the state.

The final table in this section presents a summary of the financial aid provided by medical schools to their first year medical students and to all medical students. To briefly summarize the information presented in Table 27, about 90 percent of the medical students who applied for financial aid were found to need aid by the school they were attending. On the average about 80 percent of those applying for aid received aid from the school. In addition, the average amount of financial aid awarded per school was $116,680 to first year students and $493,970 to all students. Finally, the average amount awarded per student was $2,140 for first year students receiving aid and $2,433 for all students receiving aid.

Other Students. In addition to undergraduate medical students, medical schools and their faculty deal with a wide range of other students including graduate medical students (interns, residents, and clinical fellows), students in other health-related professions*, and graduate students in the basic and clinical sciences. The numbers of these students for whom medical school faculty members have teaching responsibility are summarized in Table 28. Graduate medical students,

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* Part II of the 1974-75 Liaison Committee on Medical Education (LCME) Annual Questionnaire requested the number of students for whom medical school faculty have teaching responsibility in the following categories: allied health students, dental students, pharmacy students, nursing students, students in physician assistant programs, undergraduate Arts and Science majors, and graduate students in areas other than Basic Medical Sciences.

TABLE 26

INTERQUARTILE RANGE OF NUMBER AND PERCENT OF IN-STATE AND NON-RESIDENT MEDICAL STUDENTS IN FIRST YEAR AND ALL YEARS IN US MEDICAL SCHOOLS

1974-75

CATEGORY	25th Percentile	Median	75th Percentile	Mean
Number of In-State Medical Students	159	312.5	490	351.32
Number of Non-Resident Medical Students	14	49.5	182	120.03
Number of In-State Medical Students (1st Year)	50	83.5	126	98.03
Number of Non-Resident Medical Students (1st Year)	3	15.17	50	31.13
Percent of In-State Medical Students	5[illegible].26	88.54	96.03	75.05
Percent of In-State First Year Medical Students	57.01	87.39	95.38	74.58

Data Source: VAR043, VAR044, VAR045, VAR046, STC028, STC029.

TABLE 27

INTERQUARTILE RANGE OF THE DISTRIBUTION OF U.S. MEDICAL SCHOOLS ON SELECTED FINANCIAL AID VARIABLES FOR FIRST YEAR MEDICAL STUDENTS AND ALL MEDICAL STUDENTS 1974-75

CATEGORY	25th Percentile	Median	75th Percentile	Mean
FIRST YEAR MEDICAL STUDENTS				
Number Applying for Financial Aid	46.3	68.1	92.0	71.3
Number Needing Financial Aid	38.5	61.3	83.5	62.5
Amount of Aid Needed (Thousands of Dollars)	128.9	195.8	315.0	232.5
Number Receiving Financial Aid	30.3	52.2	72.0	53.8
Percent Receiving Financial Aid	65.4	77.3	88.2	75.4
Amount Received (Thousands of Dollars)	55.4	106.1	158.9	116.7
Amount Awarded per Student	1592	2075.	2451.0	2140.4
ALL MEDICAL STUDENTS				
Number Applying for Financial Aid	163.5	234.5	311.0	243.5
Number Needing Financial Aid	143.0	216.5	293.5	223.8
Amount of Aid Needed (Thousands of Dollars)	476.4	778.1	126.0	894.0
Number Receiving Financial Aid	124.0	188.7	253.0	199.1
Percent Receiving Financial Aid	76.8	83.1	91.1	81.1
Amount Received (Thousands of Dollars)	270.2	440.4	673.4	494.0
Amount Awarded per Student	1919.0	2291.8	2797.0	2433.6

Data Source: VAR075, VAR077, VAR080, VAR079, STC061, VAR081, STC071,
VAR076, VAR078, VAR083, VAR082, STC063, VAR084, STC073.

TABLE 28

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY NUMBER OF STUDENTS OTHER THAN UNDERGRADUATE STUDENTS FOR WHICH MEDICAL SCHOOL FACULTY HAVE TEACHING RESPONSIBILITY
1974-75

	Number of Schools					
Numbers of Students	Interns and Residents	Clinical-Science Fellows	Students in Other Health Professions*	Masters Degree Students	PhD Students	Fellows and Post-Docs
Fewer than 50	12	80	34	89	42	92
50 - 100	4	17	20	17	44	14
100 - 150	9	5	14	3	14	3
150 - 200	5	1	8	2	7	2
200 - 250	13	4	9	2	6	
250 - 300	16		2	1	1	
300 - 350	11		5			
350 - 400	9					
400 - 450	8	1	5			
450 - 500	4		2			
500 - 550	5		1			
550 - 600	1	1	2			
600 - 700	6		2			
700 - 800	2		4			
800 - 900	3		2			
900 - 1,000	2					
1,000 - 1,100	0					
1,100 - 1,500	1		1			
More than 1,500			3			
Missing	3	5	3	0	0	3
Total	114	114	114	114	114	114
Mean	325.2	45.7	269.8	34.4	75.8	22.8

Data Source: VAR055, VAR056, VAR057, VAR059, VAR060, VAR061, VAR064.

*Other Health professions include those categories on page 60. The number in this column reflect the demand of these students on faculty in terms of medical student equivalents.

which are depicted by the first two columns of Table 28, represent the biggest additional demand on clinical faculty, while students in health-related professions and basic science graduate students require more time from basic science faculty. Upon consideration of Table 28, it is apparent that the major groups of students (other than medical students) who require faculty resources from the medical schools are residents and interns, and students in allied health and other medical school related programs.

The total number of students with which medical school faculty members have responsibility is presented in Table 29. These include undergraduate and graduate medical students, basic science graduate students, and students in health-related areas. In 1974-75, the smallest number of students with which a faculty dealt was less than 200 and the largest was over 3,000. However, 65 schools dealt with between 600 and 1,400 students of all types, and the average number of students was almost 1,200.

The next two tables examine in more detail the numbers of interns and residents for whom medical school faculty had teaching responsibility in 1974-75. While the degree of responsibility of medical schools for graduate medical education programs varies widely, such programs often require a large amount of medical school clinical science faculty time and effort. Table 30 presents the distribution of medical schools with respect to the number of internship and residency positions for which medical school faculty have teaching responsibility that are filled by graduates of U.S.-Canadian medical schools, the number that are filled by graduates of foreign medical schools, and the number of positions that were unfilled in 1974-75. The preponderance of interns and residents in positions for which medical school faculty have teaching responsibility are graduates of U.S.-Canadian medical schools, ranging from fewer than 50 to more than 1,000 positions. There are comparatively fewer positions filled by graduates of foreign medical schools, and even fewer unfilled positions. The clinical science faculty of the average medical school would have teaching responsibility for 268 interns and residents who are graduates of U.S.-Canadian medical schools and 56 who are graduates of foreign medical schools.

The perspective of the internship and residency positions for which medical school faculty have teaching responsibility is made somewhat clearer by consideration of the percentage of these positions filled by graduates of U.S.-Canadian schools, the percentage filled by graduates of foreign medical schools, and the percentage of unfilled positions. The

TABLE 29

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY NUMBER OF TOTAL STUDENTS FOR WHICH MEDICAL SCHOOLS FACULTIES HAVE TEACHING RESPONSIBILITY
1974-75

Number of Students	Number of Schools	Number of Students	Number of Schools
Fewer than 200	5	1,800 - 2,000	2
200 - 400	8	2, 00 - 2,200	1
400 - 600	5	2,200 - 2,400	1
600 - 800	13	2,400 - 2,600	1
800 - 1,000	17	2,600 - 2,800	2
1,000 - 1,200	23	2,800 - 3,000	1
1,200 - 1,400	12	Over 3,000	3
1,400 - 1,600	9	Missing	3
1,600 - 1,800	8	Total	114
Mean	1,188.7		

Data from IPS modified by replacing values missing in IPS with values reported in the Journal of the American Medical Association (Crowley, 1975).

Data Source: STC101.

TABLE 30

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY THE NUMBER OF INTERNSHIP AND RESIDENCY POSITIONS FILLED BY GRADUATES OF U.S.-CANADIAN MEDICAL SCHOOLS, THE NUMBER FILLED BY GRADUATES OF FOREIGN MEDICAL SCHOOLS, AND THE NUMBER OF UNFILLED POSITIONS, 1974-75

Number of Internship and Residency Positions	Number of Schools Graduates of U.S.-Canadian Medical Schools	Graduates of Foreign Medical Schools	Unfilled Positions
Fewer than 50	13	71	104
50 - 100	6	25	6
100 - 150	9	5	1
150 - 200	11	5	
200 - 250	24	1	
250 - 300	11	3	
300 - 350	9	0	
350 - 400	6	0	
400 - 450	6	0	
450 - 500	9	1	
500 - 550	0		
550 - 600	2		
600 - 650	0		
650 - 700	0		
700 - 750	0		
750 - 800	1		
800 - 850	2		
850 - 900	0		
900 - 950	0		
950 - 1,000	0		
Over 1,000	2		
Missing	3	3	3
Total	114	114	114
Mean	267.9	56.3	17.0

Data Source: VAR066, VAR067, VAR068, VAR070, VAR071, VAR072.

distributions of medcial schools on these variables are presented in Table 31. Most of the schools, 87 of the 110 for which data was available, dealt with intern and residency positions, 65 percent or more of which were filled by graduates of U.S.-Canadian schools. Correspondingly, faculty in 88 schools dealt with less than 25 percent graduates of foreign medical schools in these positions, and in 84 schools fewer than 10 percent of the internship and residency positions were unfilled.

Alumni:* The final section of this report dealing with students briefly examines the number of living alumni the medical schools had in 1973, and what those alumni were doing. Table 32 presents the distribution of medical schools with respect to the number of living alumni as of 1973. Of the 98 medical schools for which these figures were available, the range of living alumni was from fewer than 250 to over 7,000, with an average of over 2,900. There was a great deal of diversity among schools (closely related to the age of the school) in the number of living M.D. graduates. In terms of alumni who had completed graduate medical education, the range was somewhat more restricted (less than 250 to approximately 6,000), but the variability among schools remained.

In Table 33, the percentage of medical school alumni practicing in various specialty areas is presented. Even though there is variability among schools, some general trends are evident in Table 33. Almost one-quarter (24.4 percent) of medical school alumni in 1973 were residents or interns. However, there was a range of from less than 5 percent to 100 percent of a school's alumni in graduate medical education. Of the remaining alumni, about 25 percent were practicing in each of three specialty categories -- medical specialty, surgical specialty, and other specialty. Fifteen percent of these alumni were in general practice, five percent were inactive and four percent had no specialty classification. Although these data shed some light on the problem of specialty distribution there are two limitations to any interpretations. First, medical and surgical specialties are compared to general practice rather than primary care, which is more frequently used as the basis of such comparisions. Primary care is inclusive of, but not limited to, general practice. The second problem is that these figures were collected in 1973; more recent data would certainly give a more definitive view of this area of concern.

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* The data on alumni included in this report were extracted from the American Medical Association's Directory of Medical School Alumni, 1973.

TABLE 31

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY THE PERCENTAGE OF INTERNSHIP AND RESIDENCY POSITIONS FOR WHICH MEDICAL SCHOOL FACULTY HAVE TEACHING RESPONSIBILITY FILLED BY GRADUATES OF U.S.-CANADIAN MEDICAL SCHOOLS, THE PERCENTAGE FILLED BY GRADUATES OF FOREIGN MEDICAL SCHOOLS, AND THE PERCENTAGE OF UNFILLED POSITIONS, 1974-75

Percentage of Internship and Residency Positions	Number of Schools		
	Graduates of U.S.-Canadian Medical Schools	Graduates of Foreign Medical Schools	Unfilled Positions
0	1	3	20
1-5	0	18	42
5-10	0	23	22
10-15	0	21	11
15-20	2	8	3
20-25	1	15	3
25-30	0	5	5
30-35	2	2	2
35-40	0	2	0
40-45	3	3	0
45-50	5	1	2
50-55	4	3	
55-60	2	2	
60-65	3	0	
65-70	12	2	
70-75	11	0	
75-80	12	1	
80-85	14		
85-90	12		
90-95	16		
95-100	10	1	
Missing	4	4	4
Total	114	114	114
Mean	72.9	17.8	7.2

Data Source: STC046, STC047, STC048, STC049, STC050, STC051

TABLE 32

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY NUMBER OF LIVING ALUMNI AND NUMBER OF ACTIVE ALUMNI 1973

(N=98)

	Number of Schools	
Number	Living Alumni	Active Alumni (not resident or intern)
Fewer than 250	13	13
250-500	0	3
500-750	3	2
750-1000	1	6
1000-1250	5	3
1250-1500	4	4
1500-1750	2	1
1750-2000	2	5
2000-2250	2	8
2250-2500	6	9
2500-2750	5	7
2750-3000	11	8
3000-3250	3	5
3250-3500	3	4
3500-3750	11	3
3750-4000	3	2
4000-4250	3	3
4250-4500	3	1
4500-4750	0	3
4750-5000	3	3
5000-5250	3	2
5250-5500	1	1
5500-5750	1	1
5750-6000	4	1
6000-6250	1	
6250-6500	1	
6500-6750	2	
6750-7000	0	
7000-7250	1	
7250-7500	1	
Missing	16	16
Total	114	114
Mean	2916.68	2331.8

Data Source: VAR124, STC104

TABLE 33

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY PERCENTAGES OF LIVING M.D. ALUMNI PRACTICING IN VARIOUS AREAS, 1973

	Number of Schools						
Percent	General Practice	Medical Specialty	Surgical Specialty	Other Specialty	No Specialty	Inactive Alumni	Intern and Resident
Less than 5	9	0	0	0	78	43	1
5-10	21	0	4	0	16	50	5
10-15	25	3	7	2	2	4	59
15-20	22	18	3	8	2	0	8
20-25	15	31	27	57		0	2
25-30	4	23	47	19		1	0
30-35	1	14	10	8			7
35-40	1	4		1			1
40-45		3		1			2
45-50		0		0			0
50-55		2		1			0
55-60				0			0
60-65				0			1
65-70				0			1
70-75				0			1
75-80				1			3
80-100							7
Missing	16	16	16	16	16	16	16
Total	114	114	114	114	114	114	114
Mean	14.29	25.90	24.29	25.08	4.0	5.21	24.42

Data Source: STC105, STC106, STC107, STC108, STC109, STC110, STC111

E. Medical School Faculty

The fifth of the six aspects of medical schools described in this report is the teaching faculty of the medical schools. Among the areas which will be discussed with respect to faculty are number of faculty members in medical schools; the relationship of clinical science to basic science faculty and that of students to faculty; the characteristics of faculty rank in medical schools, and the utilization of part-time and volunteer faculty by medical schools.

Table 34 presents an overview of medical school faculty in the basic sciences, clinical sciences, and total medical school. In Table 34 it can be clearly seen that in general there are a greater number of faculty members in clinical departments than there are in the basic science departments. The number of full time basic science faculty members ranges from fewer than 50 to over 200 with a mean of 89. On the other hand, the number of clinical faculty ranges from fewer than 50 to over 700, with a mean of about 236. There also appears to be less variability among medical schools in terms of the number of basic science faculty than there is in the number of clinical science faculty. While there are 57 schools that have between 50 and 100 basic science faculty, there is no such concentration of schools in number of clinical science faculty. The total number of faculty members is also highly variable as a result of the great variability in clinical faculty size. Total full time medical school faculties also ranged from fewer than 50 to over 700 in number, but with an average of 325.

To further document the general characteristics of medical school faculty members, the distributions of medical schools with respect to the percentages of faculty members who are in basic sciences, are MD's, are female, and are graduates of the school in which they are teaching are presented in Table 35. The percentage of salaried faculty members in basic sciences ranged from less than 10 to almost 90; the percentage of faculty with MD degrees from less than 20 to about 90; the percentage of female faculty from less than 10 to over 30; and the percentage of faculty teaching at the school from which they received their MD from less than 10 to over 60. The average medical school, according to the data in Table 35, would have 30 percent of its faculty members in the basic science departments. In addition, 63 percent of the faculty would be physicians, 14 percent would be females, and 12 percent would be graduates of the medical school.

TABLE 34

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY NUMBERS OF FULL-TIME BASIC SCIENCE, CLINICAL SCIENCE AND TOTAL FACULTY, 1974-75

Number of Faculty	Number of Schools		
	Basic Science	Clinical Science	Total Faculty
Fewer than 50	18	10	3
51 - 100	57	14	9
101 - 150	26	14	11
151 - 200	11	19	9
201 - 250	1	18	17
251 - 300		5	12
301 - 350		9	11
351 - 400		4	8
401 - 450		9	7
451 - 500		5	4
501 - 600		3	9
601 - 700		2	9
Over 700		1	4
Missing	1	1	1
Total	114	114	114
Mean	89.4	235.8	325.1

Data Source: VAR151, VAR158, VAR165

TABLE 35

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY PERCENTAGE OF SALARIED MEDICAL SCHOOL FACULTIES IN VARIOUS DESCRIPTIVE CATEGORIES

1974-75

	Number of Schools			
Percentages	Basic Science	MD	Female	Alumni of Medical School
Less than 10	1	0	23	50
10 - 20	15	2	76	41
20 - 30	57	0	14	19
30 - 40	30	3	1	3
40 - 50	4	6		
50 - 60	2	26		
60 - 70	1	47		1
70 - 80	0	25		
80 - 90	2	5		
Missing	2	0	0	0
Total	114	114	114	114
Mean	28.9	62.9	14.1	12.0

Data Source: FAC006, FAC001, FAC003, FAC005

Tables 36 and 37, respectively, present the relationship of the number of basic science faculty to clinical science faculty, and the relationship of the numbers of medical students and total students for whom medical school faculty have teaching responsibility to full time medical school faculty. In Table 36 the ratio of the number of full time basic science faculty members per clinical science faculty member for all medical schools is presented. The ratio ranges from less than .2 to more than 5.0 basic sciences faculty members per clinical sciences faculty member. However, 79 of the schools have a ratio of between .2 and .6 basic science faculty members per clinical faculty member. Consideration of the inverse of this ratio reveals that these 79 medical schools had between 1.67 and 5.0 clinical faculty for every basic science faculty member.

The distributions of medical schools with respect to the ratios of the number of medical students and total students to full-time faculty appear in Table 37. The ratio of medical students to full time medical school faculty is presented in the first column of the table, and the ratio of total students (including medical students, interns, residents, students in other health-related areas, and Masters and Ph.D. candidates in the basic sciences) to full time medical school faculty is presented in the second column. The range of medical student/faculty ratios is from less than .5 to over 5.5. However, the majority of the schools (71) have a ratio of between 1.0 and 2.5. It is probably accurate to speculate that medical student/faculty ratios outside of the range represent unusual schools rather than typical. Ratios below 1.0 probably are found primarily in schools which are relatively new and have not realized their full capacity for medical students, or those schools which have a large number of allied health programs which require faculty participation. Medical student/faculty ratios greater than 2.5 are probably found in schools which grant a relatively large number of MD degrees annually. The average ratio of medical students to full time faculty members in 1974-75 was 1.76 to one.

A more realistic approximation of faculty load, however, may be made by considering the ratio of total students to full time medical school faculty. The total student/faculty

TABLE 36

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY RATIO OF FULL TIME BASIC SCIENCE FACULTY TO FULL TIME CLINICAL FACULTY,

Ratio of Full-time Basic Science Faculty to Full-time Clinical Faculty	Number of Schools
Less than .20	6
.21 - .30	17
.31 - .40	25
.41 - .50	23
.51 - .60	14
.61 - .70	10
.71 - .80	4
.81 - .90	2
.91 - 1.00	3
1.01 - 2.00	5
2.01 - 5.00	2
Greater than 5.00	2
Missing	1
Total	114
Mean	.67

Data Source: FAC008

TABLE 37

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY RATIOS OF NUMBER OF MEDICAL STUDENTS AND NUMBER OF TOTAL STUDENTS TO NUMBER OF FULL TIME MEDICAL SCHOOL FACULTY, 1974-75

	Number of Schools	
Ratio	Medical Students	Total Students
Less than .50	2	0
.51 - .75	3	0
.76 - 1.00	16	0
1.01 - 1.25	10	0
1.26 - 1.50	14	2
1.51 - 1.75	19	4
1.76 - 2.00	14	1
2.01 - 2.25	4	6
2.26 - 2.50	10	7
2.51 - 2.75	8	11
2.76 - 3.00	5	8
3.01 - 3.25	2	9
3.26 - 3.50	2	4
3.51 - 3.75	1	8
3.76 - 4.00	0	6
4.01 - 4.25	0	6
4.26 - 4.50	1	8
4.51 - 4.75	0	3
4.76 - 5.00	0	3
5.01 - 5.25	0	6
5.26 - 5.50	0	1
5.51 - 5.75	1	3
5.76 - 6.00	0	2
6.01 - 6.25		3
6.26 - 6.50		0
6.51 - 6.75		2
6.76 - 7.00		0
7.01 - 7.25		1
7.26 - 7.50		0
7.51 - 7.75		0
7.76 - 8.00		1
8.01 - 8.25		2
8.26 - 8.50		0
8.51 - 8.75		1
8.76 - 9.00		0
9.01 - 9.25		0
9.26 - 9.50		0
9.51 - 9.75		1
9.76 - 10.00		0
10.01 +		2
Missing	2	3
Total	114	114
Mean	1.76	4.08

Data Source: INC058, INC059.

ratio among medical schools ranges from less than 1.5 to over 10.0. From Table 37, it is apparent that there is much greater variability among medical schools in terms of total students per faculty member, than in medical students per faculty member. This variability is evidence of the wide diversity of medical schools in terms of programs other than the MD-degree program and non-medical students which demand medical school faculty time.

Another important aspect of medical school faculty is the distribution of the faculty members with respect to rank. Table 38 presents the values of the 25th, 50th, and 75th percentiles of the distribution of medical schools by the percentage of full time medical faculty members in basic sciences, clinical sciences, and total faculty with the rank of Professor, Associate Professor, Assistant Professor, and Instructor. From the table the ranges of number and percent of faculty members in the middle fifty percent of the previously stated categories can be determined. For example, the number of Associate Professors in basic sciences in the middle fifty percent of schools ranges from 13 to 29. In addition, Associate Professors make up from 21 to 29 percent of the basic science faculties of the middle fifty percent of the distribution of U.S. medical schools. From the information presented in Table 38, it can be generally stated that a typical medical faculty would consist of 27 percent Professors, 23 percent Associate Professors, 35 percent Assistant Professors, and 15 percent Instructors. Using the same approach, it appears that basic science faculties have a higher percentage of Professors and Associate Professors (31 and 25 percent respectively) than do the clinical departments (which have an average of 26 percent Professors and 22 percent Associate Professors). Clinical departments generally have higher percentages of Assistant Professors and Instructors (35 and 17 percent) than do basic science departments (33 and 11 percent).

In a similar manner, Table 39 shows the values of the same points on the distribution of U.S. medical schools with respect to utilization of full time, part time, and volunteer faculty. It should be noted that the figures in Table 39 represent numbers of people; it would not be appropriate to equate one part-time or volunteer faculty member with a specific number of full time faculty members since the schools vary to a great degree in the extent to which volunteer faculty play an active role in the instruction of undergraduate medical students. While it might be more beneficial to assess the teaching contribution of full-time, part-time, and volunteer faculty to the

TABLE 38

INTERQUARTILE RANGES OF THE DISTRIBUTIONS OF U.S. MEDICAL SCHOOLS BY FACULTY RANK OF BASIC SCIENCE, CLINICAL, AND TOTAL FULL-TIME FACULTY, 1974-75

Rank		25th Percentile	Median	75th Percentile	Mean
BASIC SCIENCE DEPARTMENTS					
Professor	Number	16.2	25.8	35.5	27.2
	Percent	25.0	29.4	37.0	31.2
Associate Professor	Number	13.0	20.5	29.0	22.0
	Percent	21.0	24.9	29.0	25.1
Assistant Professor	Number	17.3	25.5	38.0	28.9
	Percent	28.0	32.5	38.0	33.0
Instructor	Number	2.7	6.9	14.0	10.4
	Percent	6.0	9.5	15.0	10.6
CLINICAL SCIENCE DEPARTMENTS					
Professor	Number	27.0	52.5	77.0	54.6
	Percent	20.0	24.4	30.0	26.1
Associate Professor	Number	24.5	44.2	68.0	49.7
	Percent	18.[illegible]	21.5	25.0	21.9
Assistant Professor	Number	38.0	73.9	107.0	83.5
	Percent	30.0	35.9	40.0	35.1
Instructor	Number	11.3	25.5	58.0	45.0
	Percent	10.0	16.9	23.0	17.0
TOTAL					
Professor	Number	45.0	77.0	111.0	82.5
	Percent	22.0	25.4	31.0	27.2
Associate Professor	Number	41.0	64.8	102.5	72.2
	Percent	20.0	22.6	25.0	22.8
Assistant Professor	Number	53.0	100.3	147.5	113.5
	Percent	31.0	35.2	39.0	35.1
Instructor	Number	15.6	35.8	73.0	57.1
	Percent	9.0	15.3	20.0	15.1

Data Source: VAR147, VAR148, VAR149, VAR150, VAR154, VAR155, VAR156, VAR157, VAR161, VAR162, VAR163, VAR164. (Percentage were computed from these variables and the total number of faculty in each area.)

TABLE 39

INTERQUARTILE RANGES OF THE DISTRIBUTIONS OF MEDICAL SCHOOLS BY UTILIZATION OF FULL TIME, PART TIME, AND VOLUNTEER FACULTY IN BASIC SCIENCE, CLINICAL SCIENCE, AND TOTAL, 1974-75

Category		25th Percentile	Median	75th Percentile	Mean
BASIC SCIENCE DEPARTMENTS					
Full-time Faculty	Number	57.0	78.0	115.0	89.4
	Percent	56.5	69.2	82.0	69.2
Part-time Faculty	Number	1.7	5.1	10.4	8.0
	Percent	2.0	4.1	7.0	6.2
Volunteer Faculty	Number	9.0	28.5	52.5	35.5
	Percent	12.5	25.3	36.5	24.7
CLINICAL SCIENCE DEPARTMENTS					
Full-time Faculty	Number	112.0	195.0	318.0	235.8
	Percent	17.5	25.8	37.0	31.9
Part-time Faculty	Number	16.5	42.8	74.0	67.4
	Percent	2.0	5.1	10.0	9.1
Volunteer Faculty	Number	199.5	467.5	761.0	554.5
	Percent	48.5	65.1	77.5	59.0
TOTAL					
Full-time Faculty	Number	172.0	285.0	430.0	325.1
	Percent	22.0	33.8	45.0	37.8
Part-time Faculty	Number	19.5	48.0	82.0	75.4
	Percent	2.0	5.0	9.0	8.0
Volunteer Faculty	Number	218.0	504.0	802.0	591.1
	Percent	44.0	60.0	73.0	54.2

Data Source: VAR151, VAR152, VAR153, VAR158, VAR159, VAR160, VAR165, VAR166, VAR167.
(Percentages were computed from these variables and total faculty in each area.)

medical school curriculum, such information was not available for inclusion in this report. Generally, in the basic sciences approximately 69 percent of the teaching force is full time medical school faculty, 6 percent is part time and 25 percent is volunteer. The average distribution of the clinical teaching force is 32 percent full time, 9 percent part time and 59 percent volunteer. These figures reflect the degree of utilization of community physicians for teaching in the clinical area.

Table 40 summarizes the central 50 percent of the distribution of the total teaching forces of medical schools in the United States, including full time, part time and volunteer faculty. Teaching forces in the basic sciences of this group of medical schools ranged from 82 to 167, with an average of 131 faculty of all types. Similarly the range in clinical departments was from 435 to 1,140 with an average of 837. The total number of people involved in teaching in the middle 50 percent of U.S. medical schools ranged from 521 to 1,286, with an average of approximately 970 teachers per school.

TABLE 40

INTERQUARTILE RANGES OF THE DISTRIBUTIONS OF TOTAL FACULTY IN BASIC SCIENCES, CLINICAL SCIENCES, AND ALL DEPARTMENTS (INCLUDING FULL-TIME, PART-TIME, AND VOLUNTEER FACULTY), 1974-75

	25th Percentile	Median	75th Percentile	Mean
Basic Science	82.0	121.5	167.0	130.9
Clinical Science	435.0	689.5	1140.0	836.9
Total	521.0	882.0	1268.0	969.3

Data Source: VAR151, VAR152, VAR153, VAR158, VAR159, VAR160, VAR165, VAR166, VAR167.

F. Medical School Curricula

The final section of this report deals with several aspects of the curricula of medical schools in the United States. Among the aspects of medical school curricula which are dealt with in this section are the following: (1) the duration of regular MD degree programs, (2) special options available within the programs, (3) the number of clerkships required by medical schools, (4) the number and kind of electives offered by medical schools, and (5) the types of allied programs in which medical schools participate.

In Table 41, the duration of medical school MD degree programs is described. In the upper half of the Table the duration of the regular program is described. Sixty-five medical schools have a regular four-year program without a three-year option, while 48 schools report some kind of optional program. The lower half of the table presents the responses of medical schools to two questions in the LCME-II questionnaire on the duration of MD programs. Half of the schools reporting said that it was possible to complete the MD in less than four years, and 10 schools reported having mandatory three-year curricula.

There is an apparent contradiction in the two halves of Table 41. Sixty-five schools reported a regular 4-year curriculum with no 3-year option, but only 56 schools reported that the MD program could not be completed in less than 4 years. The reason for this difference was probably due to a number of other programs which reduce the time certain classes of students spend in medical school. These programs are described in Table 42. Of the programs described in Table 42, three would reduce the amount of time a given student would spend in medical school. The three programs were (1) combined college-medical school program for high school graduates (offered by 18 schools), (2) granting advanced standing to qualified entering students (72 schools), and (3) a special program for students who have already earned a Ph.D. (10 schools). The other program offered by medical schools is a combined program in which a student may concurrently study for a Ph.D. and an MD. Programs of this type are offered by 90 medical schools, and would in most cases increase, rather than decrease, the length of a student's undergraduate association with the medical school. The last program listed in Table 42 is the Fifth Pathway Program, offered by 12 schools.

TABLE 41

DURATION OF MD DEGREE PROGRAMS
OF U.S. MEDICAL SCHOOLS, 1974-75

Duration of Regular MD Programs

Duration	Number of Schools
Regular 4-year, no 3-year option	65
Regular 4-year, 3-year option	11
Optional 3-year or 4-year	11
Other (including regular 3-year)	26
Missing	1
Total	114

Duration of MD-degree Programs Under 4 Years*

	Yes	No	Missing	Total
MD can be completed in less than 4-year	56	56	5	117
Mandatory 3-year curriculum	10	75	32	117

*Includes data for three provisional schools.

Data Source: VAR266, VAR298, VAR299.

TABLE 42

NUMBER OF SCHOOLS OFFERING SPECIFIC CURRICULAR OPTIONS IN ADDITION TO REGULAR M.D. PROGRAMS

1974-75

	Number of Schools		
Type of Program	Yes	No	Missing
Combined College-M.D. Program for High School Graduates	18	79	17
Medical School Accepts M.D.-Student with Advance Standing	72	39	3
Combined M.D.-Ph.D. Program	90	23	1
M.D. Program for Ph.D.'s-Reduced Time	10	103	1
Fifth Pathway Program for Foreign Medical School Graduates	12	100	2

Data Source: VAR300, VAR268, VAR301, VAR302, VAR303.

Under these programs, U.S. foreign medical graduates receive clinical training qualifying them for residency training and, eventually, licensing. Students in Fifth Pathway programs, however, do not receive an MD-degree from the participating U.S. medical school.

Another important aspect of medical school curricula is the role of clerkships and elective courses available to medical students in their final years of medical school. Clerkships are frequently required of students in many areas, which may include family medicine, internal medicine, obstetrics-gynecology, pediatrics, psychiatry, surgery, and one or more surgical specialties. Table 43 presents the distribution of medical schools by the number of clerkships that are required in the curriculum. The minimum number of clerkships required by a medical school was three, and the maximum was 15. Fifty-five schools required either five or six clerkships, and the mean number required was approximately 7.

Table 44 presents another aspect of medical school curricula, the nature of electives offered by the school. In the AAMC Curriculum Directory, medical schools provide information on the availability of elective courses in the 15 areas listed in Table 44 . Of these electives, the most frequently offered in 1974-75 were community medicine (91 schools), primary care (88), and emergency medicine (87). Electives in drug abuse (76), nutrition (75), health care delivery (73), human sexuality (73), and alcoholism (71) were also offered by a large number of schools. The least frequently offered electives of those listed in Table 46 were those dealing with patient education (13 schools), and medical hypnosis (19). The distribution of medical schools by the number of electives in the areas described above is presented in Table 45. Four schools did not offer any of the electives listed in Table 44, and one school offered all 15 electives. The rest of the schools seem to be fairly well spread out in terms of the number of electives offered.

The final aspect of medical schools described in this section is the kind of allied programs with which the schools are affiliated. This information is presented in Table 46 . Only 15 schools reported affiliations with active Health Maintenance Organizations (HMO's). Fifty-three schools were involved in the training of nurse practitioners, 35 in the training of physician assistants, and 8 in the training of Medex's. The participation of medical schools in this training of health care delivery personnel other than physicians is evidence of medical schools' attempts to assist in the provision of more effective overall health care delivery.

TABLE 43

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY NUMBER OF CLERKSHIPS REQUIRED IN THE CURRICULUM, 1974-75

Number of Clerkships	Number of Schools
1	0
2	0
3	1
4	0
5	23
6	32
7	16
8	15
9	6
10	4
11	5
12	7
13	0
14	1
15	1
Missing	3
Total	114
Mean	7.18

Data Source: VAR305

TABLE 44

NUMBER OF MEDICAL SCHOOLS OFFERING ELECTIVES IN SPECIFIC AREAS, 1974-75

Elective	Number of Schools Offering
Alcoholism	71
Biomedical Engineering	42
Community Medicine	91
Drug Abuse	76
Emergency Medicine	87
Ethical Problems in Medicine	66
Geriatrics	32
Health Care Delivery	73
Human Sexuality	73
Medical Hypnosis	19
Medical Jurisprudence	56
Nutrition	75
Patient Education	13
Population Dynamics	25
Primary Care	88

Data Source: VAR273 to VAR287, inclusive.

TABLE 45

DISTRIBUTION OF U.S. MEDICAL SCHOOLS BY NUMBER OF SELECTED* ELECTIVES OFFERED IN THE UNDERGRADUATE MEDICAL CURRICULUM, 1974-75

Number of Electives	Number of Schools
0	4
1	1
2	8
3	9
4	6
5	6
6	7
7	10
8	11
9	5
10	16
11	9
12	9
13	6
14	6
15	1
Total	114
Mean	7.58

* Electives reported in the 1975 AAMC Curriculum Directory.

Data Source: CRC002

TABLE 46

NUMBER OF U.S. MEDICAL SCHOOLS INVOLVED IN SELECTED ALLIED PROGRAMS IN ADDITION TO MD-DEGREE CURRICULA, 1974-75

	Number of Schools		
Type of Program	Yes	No	Missing
Medical School Involved with Active HMO	15	84	15
Medical School Training: Physician Assistants	35	61	18
Nurse Practitioners	53	44	17
Medex	8	83	23

Data Source: VAR255, VAR256, VAR257, VAR258.

SUMMARY AND CONCLUSIONS

This report is intended to give a broad, comprehensive view of medical education in the United States from the perspective of the institutions which provide that education, the medical schools. The purpose of a report of this type is to provide background information for those who develop public policy with respect to medical education and those who are responsible for planning and policy development within the institutions. To achieve the desired perspective, this report describes the institutions, and their finances, clinical facilities, students, faculties and curricula.

The data on which this report is based are drawn from a number of sources including annual questionnaires, special surveys, data collected by other organizations (primarily the American Medical Association), and other AAMC information systems. These data are stored in the Institutional Profile System maintained by the Association. At the time this report was prepared there were over 60 sources of data and over 8,000 data points possible for each of 117 medical schools on which data are maintained. A total of 399 variables were extracted from the most current sources in IPS and roughly classified into the following four categories: institutional, student, faculty, and curriculum measures. An additional 201 variables were computed from these data elements, yielding a final researchable data base of 600 variables.

From this base of 600 variables a large number were selected and summarized in tables, figures, and graphs and presented in six sections -- (1) an overview of medical schools, (2) revenue and expenditures of medical schools, (3) medical school clinical facilities, (4) medical students, (5) medical school faculties, and (6) medical school curricula.

Conclusion

The principle conclusion that one reaches in undertaking a report such as this is that medical schools in the United States are very complex and very diversified. Almost all of the measures reported showed a great deal of variation among the schools, and it is difficult in this context to comprehend underlying similarities. Still, the purposes of each of the schools are, within some latitude, the same: to produce enough highly qualified physicians to meet the societal demands for both quantity and quality of health care, to carry on research, and to care for patients.

There is little agreement on the number of physicians that are needed, the means that would most effectively produce highly qualified physicians, or the institutional measures which would allow for the evaluation of whether or not medical schools are accomplishing their goals. A descriptive report can only, within limits of space and available data, describe the current situation; it can evaluate neither the efficacy of the process nor the quality of the outcome. That task is, of necessity, left to those who make policy with respect to health manpower training, both nationally and within the institutions that are described in this report. Hopefully, this document will allow those individuals to bring a more informed perspective to the decisions they must make.

The report reveals a number of areas which are candidates for further study. Among these are differences between public and private schools, differences between developing and established schools, the quality of medical school facilities, and the variability of the process and outcomes of medical education among institutions. Each of these areas could be examined in depth with beneficial results to national and institutional policymakers.

Hopefully, the report will, in addition to providing information, raise further questions about medical schools and medical education. The Institutional Profile System, with supplemental data when necessary, could then be used as a source of data to provide timely, accurate answers to specific questions and perspective to the issues which confront those involved in and concerned about medical education in this country.

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APPENDIX A

SOURCES CONTRIBUTING TO THE RESEARCHABLE DATA BASE

	IPS Source Number	Source	Year
1.	2	Statistical Abstract of the United States	1970
2.	3	AAMC Questionnaire on Program of Health Service Delivery and Primary Care Education	1973
3.	23	DHEW Medical School Facilities Survey	1973
4.	24	AAMC Faculty Roster Aggregates	1974-75
5.	25	AMA Medical School Alumni	1973
6.	26	AAMC Curriculum Directory	1975-76
7.	50	AAMC AMCAS Aggregates	1974-75
8.	51	AAMC Undergraduate Medical Education Projected Tuition and Fees Study	1975-76
9.	52-58-63	NIH Support for Medical Schools	1965-74
10.	56	AAMC Fall Enrollment Questionnaire	1975-76
11.	57	LCME Annual Questionnaire - Part II	1974-75
12.	60	LCME Annual Questionnaire - Part I	1975-76
13.	62	AAMC Faculty Salary Survey	1975-76
14.	64	Number of Deans Appointed	1969-76

APPENDIX B
IPS RESEARCHABLE DATA BASE
1976

I. INSTITUTIONAL VARIABLES

A. Raw Variables

VARIABLE NUMBER	LABEL	IPS NUMBER(SOURCE)/ COMPUTATIONAL FORMULA
VAR001	MEDICAL COLLEGE	
VAR002	CONTROL: 0 = PUB, 1 = PRIV	
VAR003	STATE	
VAR004	REGION	
VAR005	YR FOUNDED	
VAR006	2 OR 4 YR SCHOOL	
VAR007	ACCREDITATION	
VAR171	TOTAL POPULATION (SMSA)	00366 (2)
VAR172	AREA POPULATION	00367 (2)
VAR173	POPULATION PER SQ. MILE	00368 (2)
VAR174	% NON-WHITE IN AREA POPULATION	00369 (2)
VAR175	ANNUAL TUITION PER RESIDENT MD-STUD	05874 (51)
VAR176	ANNUAL TUITION PER NON-RES MD-STUD	05875 (51)
VAR177	ANNUAL FEES PER RESIDENT MD-STUD	05876 (51)
VAR178	ANNUAL FEES PER NON-RES MD-STUD	05877 (51)
VAR179	# DEANS SERVING, 1960-1976	08596 (64)
VAR180	# DEANS APPOINTED, 1960-1976	08697 (64)
VAR181	$ REV FR MD-STUD TUITION & FEES	08012 (60)
VAR182	$ REV - TOTAL TUITION & FEES	08013 (60)
VAR183	$ REV FR FED CAPITATION GRANTS (UNRESTRICTED)	08015 (60)
VAR184	$ REV FR STATE APPROPRIATIONS - PUB SCH	08017 (60)
VAR185	$ REV FR SPEC APPROPRIATION - ST REL SCH	08019 (60)
VAR186	$ REV FR STATE GOVT SUBSIDY - PRIV SCH	08021 (60)
VAR187	$ REV FR INTER OR INTRASTATE COMPACTS	08023 (60)
VAR188	$ REV FR CITY & COUNTY GOVTS	08025 (60)
VAR189	$ REV - TOT UNRESTRICTED REV FR ALL GOVT	08027 (60)

VARIABLE NUMBER	LABEL	IPS NUMBER (SOURCE)/ COMPUTATIONAL FORMULA
VAR190	$ REV FR ENDOWMENT INCOME	08029 (60)
VAR191	$ REV - TOTAL INCOME FROM GIFTS	08035 (60)
VAR192	$ REV FR FED GOVT FOR RESEARCH	08037 (60)
VAR193	$ REV FR ST & LOC GOVT FOR RESEARCH	08039 (60)
VAR194	$ REV FR NON-GOVT SOURCES FOR RESEARCH	08040 (60)
VAR195	$ REV - TOTAL SPONSORED RESEARCH	08041 (60)
VAR196	$ REV - OTHER SEPARATELY BUDGETED RES	08043 (60)
VAR197	$ REV FR FED GOVT FOR TCH-TRN PROG	08045 (60)
VAR198	$ REV FR ST & LOC GOVT FOR TCH-TRN	03047 (60)
VAR199	$ REV FR NON-GOVT FOR TCH-TRN	08048 (60)
VAR200	$ REV - TOTAL FOR SPONSORED TCH-TRN	08049 (60)
VAR201	$ REV FR FED GOVT FOR MP & SERV PROG	08051 (60)
VAR202	$ REV FR S&L GOVT FOR MP & SERV PROG	08053 (60)
VAR203	$ REV FR NON-GOVT FOR MP & SERV PROG	08054 (60)
VAR204	$ REV - TOTAL FOR MP & SERV PROG	08055 (60)
VAR205	$ REV FR RECOV OF INDIRECT COSTS - FED	08057 (60)
VAR206	$ REV FR RECOV OF INDIR COSTS - ST & LOC	08059 (60)
VAR207	$ REV FR RECOV OF INDIR COSTS - NON-GOVT	08060 (60)
VAR208	$ REV - TOTAL RECOVERY OF INDIRECT COSTS	08061 (60)
VAR209	$ REV FR SALES & SERV OF ED DEPTS	08053 (60)
VAR210	$ REV FR ORG ACT OF ED DEPTS	08065 (60)
VAR211	$ REV FR PROF FEES - MED SERV PLANS	08067 (60)
VAR212	$ REV FR OTHER SOURCES	08069 (60)
VAR213	$ REV - TOTAL CURRENT FUNDS REVENUE	08071 (60)
VAR214	$ EXP: INSTRCT & DEPT RES - MD PROG	08073 (60)
VAR215	$ EXP: TOTAL INSTRCT & DEPT RESEARCH	08074 (60)
VAR216	$ EXP: ORG ACTIVITIES REL TO ED DEPTS	08076 (60)
VAR217	$ EXP: TOTAL SPONSORED RESEARCH	08078 (60)
VAR218	$ EXP: OTHER SEPARATELY BUDGETED RES	08079 (60)
VAR219	$ EXP: SPONSORED TEACHING-TRAINING	08081 (60)

VARIABLE NUMBER	LABEL	IPS NUMBER(SOURCE)/ COMPUTATIONAL FORMULA
VAR220	$ EXP: SPONSORED MP & SERV PROG	08082(60)
VAR221	$ EXP: EXTENSION & PUBLIC SERVICE PROG	08083(60)
VAR222	$ EXP: LIBRARIES	08085(60)
VAR223	$ EXP: OPER & MAINT OF PHYSICAL PLANT	08087(60)
VAR224	$ EXP: TOTAL ADMIN & GENERAL EXPENSE	08091(60)
VAR225	$ EXP: TOTAL CURRENT FUNDS EXPENDITURES	08093(60)
VAR226	EXCESS OF REVENUES OVER EXPENDITURES	08095(60)
VAR227	EXCESS OF EXPENDITURES OVER REVENUES	08096(60)
VAR228	$ EXP: FED PROGS - TOT DIRECT EXP	08117(60)
VAR229	$ EXP: ST & LOC PROG - TOTAL DIRECT EXP	08119(60)
VAR230	$ EXP: NON-GOVT PROGS - TOT DIRECT EXP	08121(60)
VAR231	$ EXP: TOT DIR EXP FOR NIH PROGRAMS	08125(60)
VAR232	$ EXP: TOT DIR EXP FOR OTHER DHEW PROG	08127(60)
VAR233	$ EXP: TOTL DIR EXP FOR NSF PROGS	08131(60)
VAR234	$ EXP: TOT DIR EXP FOR DOD PROGRAMS	08133(60)
VAR235	$ EXP: TOT DIR EXP FOR AEC PROGRAMS	08135(60)
VAR236	$ EXP: TOT DIR EXP FOR FED RES PROGS	08137(60)
VAR237	Q: DOES MED-SCHOOL HAVE BRANCH CAMPUSES?	07708(57)
VAR238	# BRANCH CAMPUSES USED FOR BAS SCI ED	07709(57)
VAR239	# MD-STUD AT BAS SCI BRANCH CAMPUSES	07710(57)
VAR240	# BRANCH CAMPUSES USED FOR CLINICAL ED	07711(57)
VAR241	# MD-STUD AT CLINICAL BRANCH CAMPUSES	07712(57)
VAR242	# OWNED CLINICAL FACILITIES	07713(57)
VAR243	# MAJOR CLINICAL FACILITIES	07714(57)
VAR244	# LIMITED CLINICAL FACILITIES	07715(57)
VAR245	# GRADUATE CLINICAL FACILITIES	07716(57)
VAR246	# BEDS IN OWNED CLINICAL FACILITIES	08623(57)
VAR247	# BEDS IN AFFILIATED CLINICAL FACILITIES	08625(57)
VAR248	# BEDS AVAILABLE FOR CLINICAL EDUC.	07717(57)
VAR249	# OUTPAT VISITS PER YR: OWNED CLIN FACIL	08624(57)

VARIABLE NUMBER	LABEL	IPS NUMBER(SOURCE)/ COMPUTATIONAL FORMULA
VAR250	# OUTPAT VISITS PER YR: AFFIL CLIN FACIL	08626 (57)
VAR251	# OUTPAT VISITS PER YR: ALL CLIN FACIL	07718 (57)
VAR310	$ FROM PRIOR YEAR BAL OR RESERVES	08102 (60)
VAR311	$ EXP: TOTAL DHEW PROGRAMS	08129 (60)
VAR312	$ EXP: FOUNDATION SPONSORED RESEARCH	08145 (60)
VAR313	$ EXP: BUS & IND SPONSORED RESEARCH	08149 (60)
VAR314	$ EXP: ALUMNI SPONSORED RESEARCH	08151 (60)
VAR315	$ REV FR BHRD FOR TCH-TRN CAPITATION	08157 (60)
VAR316	71-72 $ REV FR STUD TUITION & FEES - TOT	03346 (19)
VAR317	71-72 $ REV FR ST APPR. - PUB SCH	03347 (19)
VAR318	71-72 $ REV FR SPEC APPR. - ST REL SCH	03348 (19)
VAR319	71-72 $ REV FR ST SUBSIDY - PRI SCH	03349 (19)
VAR320	71-72 $ REV FR INTER OR INTRASTATE CMPCT	03350 (19)
VAR321	71-72 $ REV FR CITY & COUNTY GOVT	03351 (19)
VAR322	71-72 $ REV FR ENDOWMENT INCOME	03353 (19)
VAR323	71-72 $ REV FR GIFTS - TOTAL	03358 (19)
VAR324	71-72 $ REV FR FED GOVT FOR RESEARCH	03359 (19)
VAR325	71-72 $ REV FOR SPONSORED RESEARCH	03362 (19)
VAR326	71-72 $ REV FOR SEPARATELY BUDG RES	03363 (19)
VAR327	71072 $ REV FR FED GOVT FOR TCH-TRN	03364 (19)
VAR328	71072 $ REV FOR TCH-TRN - TOTAL	03367 (19)
VAR329	71-72 $ REV FR FED GOVT FOR RESEARCH	03368 (19)
VAR330	71-72 $ REV FR FED GOVT - UP & SERV PROG	03371 (19)
VAR331	71-72 $ REV FR RECOV INDIR COST - FED	03372 (19)
VAR332	71-72 $ REV FR SALES & SERV OF ED DEPT	03376 (19)
VAR333	71-72 $ REV FR ORG ACT OF ED DEPTS	03377 (19)
VAR334	71-72 $ REV FR PROF FEES - MED SERV PLAN	03378 (19)
VAR335	71-72 $ REV FR OTHER SOURCES	03379 (19)
VAR336	71-72 TOTAL CURRENT FUNDS REVENUE	03380 (19)
VAR337	71-72 EXCESS OF EXP OVER REV	03398 (19)
VAR338	71-72 DEF FUNDED FR PRIOR UR BAL & RESRV	03408 (19)
VAR339	IMPAC - TOT $ AWARDED - ALL APP	08561 (63)

VARIABLE NUMBER	LABEL	IPS NUMBER(SOURCE) COMPUTATIONAL FORMULA
VAR340	IMPAC: # GRANTS APPROVED - ALL APP	08562 (63)
VAR341	IMPAC: % GRANTS APPROVED - ALL APP	08563 (63)
VAR342	IMPAC: MEAN STD P-SCR - ALL APP	08566 (63)
VAR343	IMPAC: SD STD P-SCR - ALL APP	08567 (63)
VAR344	IMPAC: TOT $ AWARDED - NEW APP	08568 (63)
VAR345	IMPAC: # GRANTS APPROVED - NEW APP	08569 (63)
VAR346	IMPAC: % GRANTS APPROVED - NEW APP	08570 (63)
VAR347	IMPAC: MEAN STD P-SCR - NEW APP	08573 (63)
VAR348	IMPAC: SD STD P-SCR - NEW APP	08574 (63)
VAR349	IMPAC: TOT $ AWARDED - R01 APP	08582 (63)
VAR350	IMPAC: # GRANTS APPROVED - R01 APP	08583 (63)
VAR351	IMPAC: % GRANTS APPROVED - R01 APP	08584 (63)
VAR352	IMPAC: MEAN STD P-SCR - R01 APP	08587 (63)
VAR353	IMPAC: SD STD P-SCR - R01 APP	08588 (63)
VAR354	IMPAC: TOT $ AWARDED - P01 APP	08589 (63)
VAR355	IMPAC: # GRANTS APPROVED - P01 APP	08590 (63)
VAR356	IMPAC: % GRANTS APPROVED - P01 APP	08591 (63)
VAR357	IMPAC: MEAN STD P-SCR - P01 APP	08594 (63)
VAR358	IMPAC: SD STD P-SCR - P01 APP	08595 (63)
VAR359	IMPAC: TOT $ AWARDED - RENEWAL APPS	08575 (63)
VAR360	IMPAC: # GRANTS APPROVED - RENEWAL APPS	08576 (63)
VAR361	IMPAC: % GRANTS APPROVED - RENEWAL APPS	08577 (63)
VAR362	IMPAC: MEAN STD P-SCR - RENEWAL APPS	08580 (63)
VAR363	IMPAC: SD STD P-SCR - RENEWAL APPS	08581 (63)
VAR364	1973: $ FED GOVT SPONSORED RESEARCH - LCME-I	01099 (6)
VAR365	1974: $ FED GOVT SPONSORED RESEARCH - LCME-I	03159 (18)
VAR366	1968: $ FED GOVT SPONSORED RESEARCH - LCME-I	05530 (46)
VAR367	1969: $ FED GOVT SPONSORED RESEARCH - LCME-I	05588 (47)
VAR368	1968: $ SPONSORED RESEARCH FROM NIH, NIMH	COMP* (52)
VAR369	1969: $ SPONSORED RESEARCH FROM NIH, NIMH	COMP (52)

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* Variables Computed in IPS and Transferred as "NEWX" Variables.

VARIABLE NUMBER	LABEL	IPS NUMBER(SOURCE)/ COMPUTATIONAL FORMULA
VAR370	1973: $ SPONSORED RESEARCH FROM NIH, NIMH	COMP (52)
VAR371	1974: $ SPONSORED RESEARCH FROM NIH, NIMH	COMP (52)
VAR372	$ EXP: TOTAL DIR EXP FOR SPON PROG	08123 (60)
VAR373	$ REV: ALUMNI GIFTS	08031 (60)
VAR374	$ REV: FOUNDATION GIFTS	08032 (60)
VAR375	$ REV: BUS & IND GIFTS	08033 (60)
VAR376	$ EXP: DIR EXP FOR BUS & IND SPONS RES	08149 (60)
VAR377	$ EXP: ALUMNI SPONSORED TCH-TRN	08191 (60)
VAR378	$ EXP: TOTAL DIR EXP NON-GOVT SPONS RES	08155 (60)
VAR379	$ EXP: TOTAL DIR EXP NON-GOVT TCH-TRN	08195 (60)
VAR380	$ EXP: DIRECT RESEARCH EXP - TOTAL DHEW	08129 (60)
VAR381	$ EXP: SALARY EXP FUNDED BY FED GOVT	08118 (60)
VAR382	$ EXP: TOTAL SALARY EXPENSE	08124 (60)
VAR383	DRG GRANTS - # R01 APPS REVIEWED	08842 (63)
VAR384	DRG GRANTS - # R01 APPS APPROVED	08843 (63)
VAR385	DRG GRANTS - $ AMT OF R01 APPS REVIEWED	08844 (63)
VAR386	DRG GRANTS - $ AMT OF R01 APPS AWARDED	08845 (63)
VAR387	$ EXP: BHRD SPECIAL PROJECTS	08161 (60)
VAR392	1974-75 RESIDENT MD-STUDENT TUITION	07903 (57)
VAR393	1974-75 NON-RESIDENT MD-STUD TUITION	07904 (57)
VAR394	1975-76 RESIDENT MD-STUDENT TUITION	07905 (57)
VAR395	1975-76 NON-RESIDENT MD-STUDENT TUITION	07906 (57)
VAR396	1976-77 RESIDENT MD-STUDENT TUITION	07907 (57)
VAR397	1976-77 NON-RESIDENT MD-STUDENT TUITION	07908 (57)

B. Computed Variables

INC001	RAT: POP IN SMSA TO MD-STUD IN SMSA	VAR171/VAR016*
INC002	LCME FED SPON RES CON$ % CHG 67-9 TO 72-4	100* (VAR364 / 1.505 + VAR365 / 1.602) / VAR366 / 1.76 + VAR367 / 1.240) - 1.0)

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*VAR016 was summed for all schools in an SMSA for the computation of INC001.

VARIABLE NUMBER	LABEL	IPS NUMBER(SOURCE)/ COMPUTATIONAL FORMULA
INC003	DRG FED SPON RES CONS $ %/CHG 67-9 TO 72-4	100* ((VAR370 / 1.505 + VAR371 / 1.602) / (VAR368 / 1.76 + VAR369 / 1.240) - 1.0)
INC004	ADJUSTED TOTAL REVENUE	VAR213 + VAR227 - VAR310
INC005	$ SPONS PROG EXPD INCL CAPITATION	VAR372 + VAR183
INC006	% REV FROM UNRESTR ENDOW AND GIFTS	100* (VAR190 + VAR191) / INC004
INC007	% REV FROM FED SOURCES & RCOV IND COSTS	100* (VAR183 + VAR205 + VAR192 + VAR197 + VAR201) / INC004
INC008	% REV FROM TUITION & FEES	100* VAR182 / INC004
INC009	% REV FROM BUS & IND GIFTS	100* (VAR375 + VAR376) / INC004
INC010	% REV FROM FOUNDATION GIFTS	100* (VAR312 + VAR374) / INC004
INC011	% REV FROM ALUMNI GIFTS	100* (VAR373 + VAR314 + VAR377) / INC004
INC012	% REV FROM ALL GIFTS	100* (VAR191 + VAR378 + VAR379) / INC004
INC013	% REV FROM STATE GOVERNMENTS	100* (VAR189 - VAR183 - VAR188) / INC004
INC014	% SPONSORED RES REV FROM FED GOVT	100* VAR192 / VAR195
INC015	% SPONS RES REV FR ST & LOC GOVT	100* VAR193 / VAR195
INC016	% SPONS RES REV FROM NON-GOVT SOURCES	100* VAR194 / VAR195
INC017	% TOTAL EXPD FOR SPON RESEARCH	100* VAR195 / VAR225
INC018	% REV FROM INDIRECT COST RECOVERY	100* VAR203 / INC004
INC019	% REV FROM PROFESSIONAL FEES	100* VAR211 / INC004
INC020	% EXP FOR MED INSTR & DEPT RES	100* VAR214 / VAR225
INC021	% EXP FOR SPONSORED RESEARCH	100* VAR217 / VAR225
INC022	% EXPD FOR OTHER SEP BUDGETED RES	100* VAR218 / VAR225

VARIABLE NUMBER	LABEL	IPS NUMBER (SOURCE)/ COMPUTATIONAL FORMULA
INC023	% REV FOR SPONS TCH-TRN	100* (VAR219 + VAR 183) / (VAR225 + VAR183)
INC024	% EXPD FOR MULTI-PURPOSE & SERVICE PGMS	100* VAR220 / VAR225
INC025	% EXPD FOR OPER & MAINT OF PHYS PLANT	100* VAR223 / VAR225
INC026	% EXPD FOR ADMIN & GENL EXPENSE	100 VAR224/ VAR225
INC027	% SPONS PGM EXPD FROM FEDS	100* (VAR228 + VAR183) / INC005
INC028	% SPONS PGM EXPD FR ST & LOC GOVT	100* VAR229 / INC005
INC029	% SPONS PGM EXPD FROM NON-GOVT	100* VAR230 / INC005
INC030	% FED SPONS RES $ FROM NIH	100* VAR231 / VAR236
INC031	% FED SPONS RES $ FROM DHEW	100* VAR380 / VAR236
INC033	% FED SPONS RES $ FROM DOD	100* VAR234 / VAR236
INC034	RAT: $ EXPD PER MD STUDENT	VAR225 / VAR016
INC035	# OWNED OR AFFIL CLINICAL FACILITIES	VAR242 + VAR243 + VAR244 + VAR245
INC036	RAT: $ EXPD PER FT FACULTY	VAR225 / VAR165
INC037	RAT: PROFESSIONAL FEES PER FT CLIN FAC	VAR221 / VAR158
INC038	RAT: AVAIL TCHNG BEDS PER MD-STUDENT	VAR248 / VAR016
INC039	RAT: SPONS PGM EXPD PER FT FAC	INC005 / VAR165
INC040	RAT: FT FACULTY TO MD-STUDENTS	VAR165 / VAR016
INC041	RAT: FT FAC TO TOTAL STUDENTS	VAR165 / STC101
INC042	% SPONS FAC SALARIES FROM FED $	100* VAR381 / VAR382
INC043	REG OPER EXPD: TOTAL - SPONSORED	VAR225 - VAR217 - VAR21[illegible] - VAR220
INC044	RAT: REG OPER EXPD PER MD-STUDENT	INC043 / VAR016
INC045	APPROVAL RATE OF NIH R01 COMP APPS	100* VAR384 / VAR383
INC046	NIH - NIMH R01 $ AWARD AS % OF $ APP SBMT	100* VAR386 / VAR385

VARIABLE NUMBER	LABEL	IPS NUMBER (SOURCE)/ COMPUTATIONAL FORMULA
INC047	AVERAGE $ AWARD PER R01 APP APPROVED	VAR386 / VAR384
INC048	LOG AGE OF MEDICAL SCHOOL	LG10 (1975 - VAR009)
INC049	RAT: SPECIAL PROJECTS $ TO TOTAL STUDENTS	VAR387 / STC101
INC050	RAT: SPECIAL PROJECTS $ TO MD-STUDENTS	VAR387 / VAR016
INC051	% SPONSORED TCH-TRN $ FROM FED GOVT	100* VAR327 / VAR328
INC052	RAT: RESIDENT TO NON-RES TUITION	VAR392 / VAR393
INC053	$ REV: TOTAL ENDOWMENT & GIFT REV	VAR190 + VAR191
INC054	% TOTAL EXP FOR SPONSORED PROGS	INC005 / INC004
INC055	RAT: ALLIED HEALTH STUD EQUIVS TO MD-STUD	VAR059 / VAR016
INC056	RAT: TOTAL REV TO TOTAL STUDENTS	VAR213 / STC101
INC057	RAT: REG OPER EXPD PER FT FAC	INC043 / VAR 165
INC058	RAT: MD STUDENTS TO FT FAC	VAR016 / VAR165
INC059	RAT: TOTAL STUDENTS TO FT FAC	STC101 / VAR165
INC060	Q: REV CAREER CH OF MD-GRADS IN 5 YR	IF VAR263 = 1 or VAR398 = 1, THEN INC060 = 1

II. STUDENT VARIABLES

A. Raw Variables

VAR008	# MALE 1ST-YR MED-STUDENTS	07143 (57)
VAR009	# FEMALE 1ST-YR MD-STUDENTS	07144 (57)
VAR010	# 1ST-YR MD-STUDENTS	07145 (57)
VAR011	# MALE FINAL YR MD-STUDENTS	07146 (57)
VAR012	# FEMALE FINAL YR MD-STUDENTS	07147 (57)
VAR013	# FINAL YEAR MD-STUDENTS	07148 (57)
VAR014	# MALE MD-STUDENTS	07152 (57)
VAR015	# FEMALE MD-STUDENTS	07153 (57)
VAR016	# MD-STUDENTS	07154 (57)
VAR017	# NON US-CANADIAN 1ST-YR MD-STUD	07157 (57)
VAR018	# NON US-CANADIAN FIN-YR MD-STUD	07158 (57)

VARIABLE NUMBER	LABEL	IPS NUMBERS (SOURCE)/ COMPUTATIONAL FORMULA
VAR019	# NON US-CANADIAN MD-STUDENTS	07160 (57)
VAR020	# MALES REPEATING 1ST YR	07253 (57)
VAR021	# FEMALES REPEATING 1ST YR	07254 (57)
VAR022	# MD-STUD ADMT ADV STDG FR US-CAN MED SCH	07289 (57)
VAR023	# MD-STUD ADMT ADV STDG FR FOR MED SCH	07290 (57)
VAR024	# MD-STUD ADMT ADV STDG FR OSTEO MED SCH	07291 (57)
VAR025	# MD-STUD ADMT ADV STDG FR OTHER PROG	07292 (57)
VAR026	# 1ST-YR MED STUD: PRE-MED GPA 3.6-4.0	07293 (57)
VAR027	# 1ST-YR MD-STUD: PRE-MED GPA 2.6-3.5	07294 (57)
VAR028	# 1ST-YR MD-STUD: PRE-MED GPA 2.6	07295 (57)
VAR029	# 1ST-YR MD-STUD: PRE-MED GPA UNKNOWN	07296 (57)
VAR030	# 1ST-YR MD-STUD: 2 YR COLL OR LESS	07298 (57)
VAR031	# 1ST-YR MD-STUD: 3 YR COLL	07299 (57)
VAR032	# 1ST-YR MD-STUD: 4 YR COLL OR MORE	07300 (57)
VAR033	# 1ST-YR MD-STUD: HIGHEST DEG BA OR BS	07302 (57)
VAR034	# 1ST-YR MD-STUD: HIGHEST DEG MASTER'S	07303 (57)
VAR035	# 1ST-YR MD-STUD: HIGHEST DEG DOCTORATE	07304 (57)
VAR036	# 1ST- YR MD- STUD: EARNED OTHER DEGREE	07305 (57)
VAR037	# 1ST-YR MD-STUD: NO DEGREE EARNED	07306 (57)
VAR038	# PROJECTED 1ST-YR MD STUDENTS, 1975-76	07313 (57)
VAR039	# PROJECTED 1ST-YR MD STUDENTS, 1976-77	07314 (57)
VAR040	# PROJECTED 1ST-YR MD STUDENTS, 1979-80	07317 (57)
VAR041	# MD-STUD FROM STATES GIVEN ADM-PREF	07328 (57)
VAR042	Q: DOES MED SCH HAVE ADM-PREF AGRMT?	07329 (57)
VAR043	# IN-STATE MD-STUD	07330 (57)
VAR044	# NON-RESIDENT MD-STUD	07331 (57)
VAR045	# IN-STATE 1ST-YR MD-STUD	07334 (57)
VAR046	# NON-RESIDENT 1ST-YR MD-STUD	07335 (57)
VAR047	# MALE 1ST-YR MD-STUD WITHDREW, ACADEMIC	07338 (57)

VARIABLE NUMBER	LABEL	IPS NUMBERS (SOURCE)/ COMPUTATIONAL FORMULA
VAR048	# FEMALE 1ST-YR MD STUD WITHDREW, ACADEMIC	07339 (57)
VAR049	# MALE MD STUD WITHDREW, ACADEMIC	07344 (57)
VAR050	# FEMALE MD STUD WITHDREW, ACADEMIC	07345 (57)
VAR051	# MALE 1ST-YR MD-STUD WITHDREW, ALL	07386 (57)
VAR052	# FEMALE 1ST-YR MD-STUD WITHDREW, ALL	07387 (57)
VAR053	# MALE MD STUD WITHDREW, ALL	07388 (57)
VAR054	# FEMALE MD STUD WITHDREW, ALL	07393 (57)
VAR055	# INTERNS INSTRUCTED BY MED SCH FAC	07556 (57)
VAR056	# RESIDENTS INSTRUCTED BY MED SCH FAC	07557 (57)
VAR057	# CLIN SCI FELLOWS INSTRUCTED BY MED SCH FAC	07558 (57)
VAR058	# ALLIED HEALTH STUD INSTR BY MED SCH FAC	07567 (57)
VAR059	# A-HLTH STUD EQUIV INSTR BY MED SCH FAC	07568 (57)
VAR060	# MS CANDIDATES - BAS SCI	07619 (57)
VAR061	# PH.D. CANDIDATES - BAS SCI	07620 (57)
VAR062	# MS DEGREES CONFERRED - BAS SCI	07621 (57)
VAR063	# PH.D. DEGREES CONFERRED - BAS SCI	07622 (57)
VAR064	# FELLOWS POST-DOCS - BAS SCI	07623 (57)
VAR065	# INTERNSHIP POSITIONS	07632 (57)
VAR066	# US-CAN MD GRADS IN INTERNSHIP POSITIONS	07633 (57)
VAR067	# FMG'S IN INTERNSHIP POSITIONS	07634 (57)
VAR068	# UNFILLED INTERNSHIP POSITIONS	07635 (57)
VAR069	# RESIDENCY POSITIONS	07704 (57)
VAR070	# US-CAN MD GRADS IN RESIDENCY POSITIONS	07705 (57)
VAR071	# FMG'S IN RESIDENCY POSITIONS	07706 (57)
VAR072	# UNFILLED RESIDENCY POSITIONS	07707 (57)
VAR073	# CONTINUING MED ED STUDENT EQUIVS	07912 (57)
VAR074	# HOURS OF CONTINUING MED ED COURSES	07911 (57)
VAR075	# 1ST-YR MD STUD APPLYING FOR FIN AID	07839 (57)
VAR076	# MD STUD APPLYING FOR FIN AID	07843 (57)
VAR077	# 1ST-YR MD STUD NEEDING FIN AID	07844 (57)
VAR078	# MD STUD NEEDING FIN AID	07848 (57)

VARIABLE NUMBER	LABEL	IPS NUMBERS (SOURCE)/ COMPUTATIONAL FORMULA
VAR079	# 1ST-YR MD STUD RECEIVING FIN AID FR MS	07849 (57)
VAR080	$ AMT FIN AID NEEDED BY 1ST-YR MD STUD	07854 (57)
VAR081	$ AMT FIN AID DIST TO 1ST-YR MD STUD	07859 (57)
VAR082	# MD STUD REC FIN AID FR MED SCH	07853 (57)
VAR083	$ AMT FIN AID NEEDED BY ALL MD STUD	07858 (57)
VAR084	$ AMT FIN AID DIST TO ALL MD STUD	07863 (57)
VAR085	# MD STUD RECEIVING LOANS ONLY	07864 (57)
VAR086	# MD STUD RECEIVING SCHOLARSHIPS ONLY	07865 (57)
VAR087	# MD STUD RECEIVING LOANS & SCHOLARSHIPS	07866 (57)
VAR088	1ST-YR MD STUD: MEAN OVERALL GPA	05761 (50)
VAR089	1ST-YR MD STUD: MEAN SCIENCE GPA	05763 (50)
VAR090	1ST-YR MD STUD: MEAN MCAT VERBAL SCORE	05765 (50)
VAR091	1ST-YR MD STUD: MEAN MCAT QUANT SCORE	05767 (50)
VAR092	1ST-YR MD STUD: MEAN MCAT GEN INFO SCORE	05769 (50)
VAR093	1ST-YR MD STUD: MEAN MCAT SCIENCE SCORE	05771 (50)
VAR094	1ST-YR MD STUD: AVERAGE AGE	05773 (50)
VAR095	# 1ST-YR MD STUD: AFRO-AMER	05776 (50)
VAR096	# 1ST-YR MD STUD: AMER INDIAN	05778 (50)
VAR097	# 1ST-YR MD STUD: ORIENTAL AMER	05780 (50)
VAR098	# 1ST-YR MD STUD: MEXICAN-AMER	05782 (50)
VAR099	# 1ST-YR MD STUD: MNLND PUERTO RICAN	05784 (50)
VAR100	# 1ST-YR MD STUD: FOREIGN NATIONALS	05786 (50)
VAR102	74 APPLICANTS: MEAN OVERALL GPA	05760 (50)
VAR103	74 APPLICANTS: MEAN SCIENCE GPA	05762 (50)
VAR104	74 APPLICANTS: MEAN MCAT VERBAL SCORE	05764 (50)
VAR105	74 APPLICANTS: MEAN MCAT QUANT SCORE	05766 (50)
VAR106	74 APPLICANTS: MEAN MCAT GEN INFO SCORE	05768 (50)
VAR107	74 APPLICANTS: MEAN MCAT SCIENCE SCORE	05770 (50)
VAR108	74 APPLICANTS: MEAN AGE	05772 (50)
VAR109	74 APPLICANTS: # OF APPLICANTS	05774 (50)

VARIABLE NUMBER	LABEL	IPS NUMBERS (SOURCE)/ COMPUTATIONAL FORMULA
VAR110	74 APPLICANTS: # AFRO-AMERICAN	05775 (50)
VAR111	74 APPLICANTS: # AMER INDIAN	05777 (50)
VAR112	74 APPLICANTS: # ORIENTAL AMERICANS	05779 (50)
VAR113	74 APPLICANTS: # MEXICAN AMERICANS	05781 (50)
VAR114	74 APPLICANTS: # MNLND PUERTO RICAN	05783 (50)
VAR115	74 APPLICANTS: # FOREIGN	05785 (50)
VAR116	74 APPLICANTS: # FEMALE	05787 (50)
VAR117	74 APPLICANTS: # IN-STATE	05789 (50)
VAR118	# MD STUD IN FINAL YR	07148 (57)
VAR119	# MALE MID YR MD STUD WITHDREW - ALL	07390 (57)
VAR120	# FEMALE MID-YR MD STUD WITHDREW - ALL	07391 (57)
VAR121	# FINAL YR MD STUD NEEDING FIN AID	07847 (57)
VAR122	# FINAL YR MD STUD REC FIN AID	07852 (57)
VAR123	$ AMT OF FIN AID TO FIN YR MD STUD	07862 (57)
VAR124	# LIVING GRADS OF MED SCHOOL, 1973	04552 (25)
VAR125	# LIV GRAD IN GEN PRAC	04553 (25)
VAR126	# LIV GRAD IN MEDICAL SPEC	04554 (25)
VAR127	# LIV GRAD IN SURGICAL SPEC	04555 (25)
VAR128	# LIV GRAD IN OTHER SPECS	04556 (25)
VAR129	# LIV GRADS NOT SPECIALTY CERTIFIED	04557 (25)
VAR130	# INACTIVE MD GRADUATES	04558 (25)
VAR131	# LIV GRAD: INTERN & RESIDENT	04559 (25)
VAR132	# LIV GRAD: MEMBER OF 1 SPEC BOARD	04560 (25)
VAR133	# LIV GRAD: MEMBER GT. 1 SPEC BOARD	04561 (25)
VAR399	# UNDERREP MINORITY MD STUD, ALL YR.	07167 + 07168 + (57) 07175 + 07176 + (57) 07191 + 07192 + (57) 07207 + 07208 (57)

B. Computed Variables

STC001	% FEMALE 1ST-YR MD STUDENTS	(VAR009 *100) / VAR010
STC002	% FEMALE FIN YR MD STUDENTS	(VAR012 *100) / VAR013

VARIABLE NUMBER	LABEL	IPS NUMBERS/ COMPUTATIONAL FORMULA
STC003	% FEMALE MD STUDENTS	(VAR015 *100) / VAR016
STC004	% MALE MD STUD REPEATING 1ST YR	(VAR020 *100) / VAR008
STC005	% FEMALE MD STUD REPEATING 1ST YR	(VAR021 *100) / VAR009
STC006	% MD STUD IN 1ST YEAR	(VAR010 *100) / VAR016
STC007	% MD STUD IN FINAL YEAR	(VAR013 *100) / VAR016
STC008	% NON US-CANADIAN 1ST-YR MD STUD	(VAR017 *100) / VAR010
STC009	% NON US-CANADIAN FIN YR MD STUD	(VAR018 *100) / VAR013
STC010	% NON US-CANADIAN MD STUD	(VAR019 *100) / VAR016
STC011	# MD STUD ADMT ADV STDG	(VAR022 + VAR023 + VAR024 + VAR025)
STC012	% ADMT MD STUD WITH ADV STDG	(STC011 *100) / (VAR010 + STC011)
STC013	% 1ST-YR MD STUD: PRE-MED GPA 3.6-4.0	(VAR026 *100) / VAR010
STC014	% 1ST-YR MD STUD: PRE-MED GPA 2.6-3.5	(VAR027 *100) / VAR010
STC015	% 1ST-YR MD STUD: PRE-MED GPA 2.5	(VAR028 *100) / VAR010
STC016	% 1ST-YR MD STUD: PRE-MED GPA UNK	(VAR029 *100) / VAR010
STC017	% 1ST-YR MD STUD: 2 YR COLL OR LESS	(VAR030 *100) / VAR010
STC018	% 1ST-YR MD STUD: 3 YR COLL	(VAR031 *100) / VAR010
STC019	% 1ST-YR MD STUD: 4 YR COLL OR MORE	(VAR032 *100) / VAR010
STC020	% 1ST-YR MD STUD: NO DEGREE	(VAR037 *100) / VAR010
STC021	% 1ST-YR MD STUD: BA OR BS	(VAR033 *100) / VAR010
STC022	% 1ST-YR MD STUD: MASTERS DEGREE	(VAR034 *100) / VAR010
STC023	% 1ST-YR MD STUD: PH.D.	(VAR035 *100) / VAR010
STC024	% 1ST-YR MD STUD: OTHER DEGREE	(VAR036 *100) / VAR010
STC025	% 1ST-YR MD STUD: MASTERS OR PHD	((VAR036 + VAR035) *100) / VAR010
STC026	RAT: IN-STATE TO NON-RES 1ST-YR MD-STUD	VAR045 / VAR046
STC027	RAT: IN-STATE TO NON-RES MD STUD	VAR043 / VAR044
STC028	% IN-STATE MD STUD	(VAR043 *100) / VAR016
STC029	% IN-STATE 1ST-YR MD STUD	(VAR045 *100) / VAR010

VARIABLE NUMBER	LABEL	IPS NUMBERS (SOURCE)/ COMPUTATIONAL FORMULA
STC030	% 1ST-YR MALE MD STUD WITHDREW, ACADEMIC	(VAR047 *100) / VAR008
STC031	% 1ST-YR FEMALE MD STUD WITHDREW, ACADEMIC	(VAR048 *100) / VAR009
STC032	% 1ST-YR MD STUD WITHDREW, ACADEMIC	(VAR047 + VAR048) *100 / VAR010
STC033	% MALE MD STUD WITHDREW, ACADEMIC	(VAR049 *100) / VAR014
STC034	% FEMALE MD STUD WITHDREW, ACADEMIC	(VAR050 *100) / VAR015
STC035	% MD STUD WITHDREW, ACADEMIC	((VAR049 + VAR050) *100) / VAR016
STC036	% 1ST-YR MALE MD STUD WITHDREW, ALL	(VAR051 *100) / VAR008
STC037	% 1ST-YR FEMALE MD STUD WITHDREW, ALL	(VAR052 *100) / VAR009
STC038	% 1ST-YR MD STUD WITHDREW, ALL	((VAR051 + VAR052) *100) / VAR010
STC039	% MALE MD STUD WITHDREW, ALL	(VAR053 *100) / VAR014
STC040	% FEMALE MD STUD WITHDREW, ALL	(VAR054 *100) / VAR015
STC041	% MD STUD WITHDREW, ALL	((VAR053 + VAR054) *100) / VAR016
STC042	# POST-GRAD MD STUD - HOUSESTAFF	VAR055 + VAR056 + VAR057
STC043	RAT: HOUSESTAFF TO UNDERGRAD MD STUD	STC043 / VAR016
STC044	RAT: ALLIED-HLTH-STD TO UNDERGRAD MD STUD	VAR058 / VAR016
STC045	RAT: BMS GRAD STUD TO UNDERGRAD MD STUD	(VAR060 + VAR061 + VAR062 + VAR063 + VAR064) / VAR016
STC046	% INTERN POS FILLED BY US-CAN GRADS	(VAR066 *100) / VAR065
STC047	% INTERN POS FILLED BY FMG'S	(VAR067 *100) / VAR065
STC048	% INTERN POS UNFILLED	(VAR068 *100) / VAR065
STC049	% RES POS FILLED BY US-CAN GRADS	(VAR070 *100) / VAR069
STC050	% RES POS FILLED BY FMG'S	(VAR071 *100) / VAR069
STC051	% RESIDENCY POSITIONS UNFILLED	(VAR072 *100) / VAR069
STC052	% HOUSESTAFF POSITIONS UNFILLED	((VAR068 + VAR072) *100) / (VAR065 + VAR069)

VARIABLE NUMBER	LABEL	IPS NUMBER (SOURCE)/ COMPUTATIONAL FORMULA
STC053	% FMG HOUSESTAFF	((VAR067 + VAR071) *100) / (VAR065 + VAR069)
STC054	# HOUSESTAFF POSITIONS	VAR065 + VAR069
STC055	% 1ST-YR MD STUD APPLY FIN AID	(VAR075 *100) / VAR010
STC056	% FIN YR MD STUD APPLY FIN AID	(VAR118 *100) / VAR01[illegible]
STC057	% MD STUD APPLY FIN AID	(VAR076 *100) / VAR016
STC058	% 1ST-YR MD STUD REC FIN AID FR MED SCH	(VAR122 *100) / VAR013
STC060	% MD STUD REC FIN AID FR MED SCH	(VAR082 *100) / VAR016
STC061	% 1ST-YR APPLICANTS REC AID FR MED SCH	(VAR079 *100) / VAR075
STC062	% FIN YR APPLICANTS REC AID FR MED SCH	(VAR122 *100) / VAR118
STC063	% ALL APPLICANTS REC FIN AID FR MED SCH	(VAR082 *100) / VAR076
STC064	% 1ST-YR APPLICANTS NEEDING AID	(VAR077 *100) / VAR075
STC065	% FIN YR APPLICANTS NEEDING AID	(VAR121 *100) / VAR118
STC066	% ALL APPLICANTS NEEDING AID	(VAR078 *100) / VAR076
STC067	% 1ST-YR MD STUD NEEDING AID WHO REC AID	(VAR079 *100) / VAR077
STC068	% FIN YR MD STUD NEEDING AID WHO REC AID	(VAR122 *100) / VAR121
STC069	% MD STUD NEEDING AID WHO REC AID	(VAR082 *100) / VAR078
STC070	$ NEEDED PER 1ST-YR MD STUD NEEDING AID	(VAR080 / VAR077)
STC071	$ AWARDED PER 1ST-YR MD STUD REC AID	(VAR081 / VAR079)
STC072	$ NEEDED PER MD STUD NEEDING AID	(VAR083 / VAR078)
STC073	$ AWARDED PER MD STUD REC AID	(VAR084 / VAR082)
STC074	$ AWARDED PER FIN YR MD STUD REC AID	(VAR123 / VAR122)
STC075	% MD STUD REC LOANS ONLY	(VAR085 *100) / VAR082
STC076	% MD STUD REC SCHOLARSHIPS ONLY	(VAR086 *100) / VAR082
STC077	% MD STUD REC LOAN & SCHOLARSHIP	(VAR087 *100) / VAR082
STC078	% $ AWARD TO $ NEED - 1ST-YR MD STUD	(VAR081 *100) / VAR080
STC079	% $ AWARD TO $ NEED - ALL MD STUD	(VAR084 *100) / VAR083

VARIABLE NUMBER	LABEL	IPS NUMBER/ COMPUTATIONAL FORMULA
STC080	% AFRO-AMERICAN 1ST-YR MD STUD	(VAR095 *100) / VAR010
STC081	% OTHER UNDERREP MINORITY 1ST-YR MD STUD	((VAR096 + VAR098 + VAR099) *100) / VAR010
STC082	% UNDERREP MINORITY 1ST-YR MD STUD	STC080 + STC081
STC083	% FOREIGN NATIONAL 1ST-YR MD STUD	(VAR100 *100) / VAR010
STC084	RAT: APPLICANT PER 1ST-YR MD STUD	VAR109 / VAR010
STC085	RAT: FEM APPLICANT PER FEM 1ST-YR MD STUD	VAR116 / VAR009
STC086	RAT: MALE APPLICANT PER MALE 1ST-YR MD STUD	(RND ((VAR109 - VAR116) *100) / VAR008)) / 100 (VAR109 - VAR116) / VAR008
STC087	RAT: MINORITY APP PER MIN 1ST-YR MD STUD	(VAR110 +VAR111 + VAR113 + VAR114) / (VAR095 + (VAR096 + VAR098 + VAR099)
STC088	% AFRO-AMERICAN APPLICANTS	(VAR110 *100) / VAR109
STC089	% OTHER UNDERREP MINORITY APPLICANTS	((VAR111 + VAR113 + VAR114) *100) / VAR109
STC090	% UNDERREPRESENTED MINORITY APPLICANTS	STC088 + STC089
STC091	% FEMALE APPLICANTS	(VAR116 *100) / VAR109
STC092	% IN-STATE APPLICANTS	(VAR117 *100) / VAR109
STC093	% FOREIGN APPLICANTS	(VAR115 *100) / VAR109
STC094	DIFF: MEAN MATRIC-MEAN APP AGE	VAR094 - VAR108
STC095	DIFF: MEAN MATRIC-MEAN APP OVERALL GPA	VAR088 - VAR102
STC096	DIFF: MEAN MATRIC-MEAN APP SCIENCE GPA	VAR089 - VAR103
STC097	DIFF: MEAN MATRIC-MEAN APP MCAT VERBAL	VAR090 - VAR104
STC098	DIFF: MEAN MATRIC-MEAN APP MCAT QUANT	VAR091 - VAR105
STC099	DIFF: MEAN MATRIC-MEAN APP MCAT GEN INFO	VAR092 - VAR106
STC100	DIFF: MEAN MATRIC-MEAN APP MCAT SCIENCE	VAR093 - VAR107
STC101	TOTAL STUDENTS - ALL TYPES	VAR016 + VAR055 + VAR056 + VAR059 + VAR060 + VAR061

VARIABLE NUMBER	LABEL	IPS NUMBER (SOURCE)/ COMPUTATIONAL FORMULA
STC102	% MID YR MD STUD WITHDREW, ALL	100 * (VAR119 + VAR120) / (VAR016 - VAR013 - VAR010)
STC103	% PRE-1967 MD ALUM ON FAC OF ANY MED SCH	100 *VAR141 / VAR146
STC104	# MD ALUMNI - NOT RSDNT OR INTRN	VAR124 - VAR131
STC105	% LIVING MD ALUMNI IN GENERAL PRACTICE	100* VAR125 / STC104
STC106	% LIVING MD ALUM IN MEDICAL SPECIALTY	100* VAR126 / STC104
STC107	% LIVING MD ALUM IN SURGICAL SEPCIALTY	100* VAR127 / STC104
STC108	% LIVING MD ALUM IN OTHER SPECIALTY	100* VAR128 / STC104
STC109	% LIVING MD ALUM IN NO SPECIALTY	100* VAR129 / STC104
STC110	% LIVING MD ALUM INACTIVE	100* VAR130 /STC104
STC111	% LIVING MD ALUM INTERN OR RESIDENT	100* VAR131 / VAR124
STC112	% LIVING MD ALUM BOARD CERTIFIED	100* (VAR132 + VAR133) / STC104
STC113	% ACT LIV MD ALUM ON FAC OF OTHER MD SCH	100 * (VAR141 - VAR140) / STC104
STC114	PROJECTED ANNL % 1ST-YR ENROLL CHG: 1974-79	100* (EXP (LN (VAR040 / VAR010) / 5) - 1.0
STC115	% UNDERREP MINORITY MD STUD, ALL YR	100* VAR399 / VAR016
STC116	% MD STUD REQST AID WHO REC AID	100* VAR082 / VAR076
STC117	RAT: AL-HLTH-STUD EQUIV TO U/G MD STUD	VAR059 / VAR016

III. FACULTY VARIABLES

A. Raw Variables

VAR134	# FT & PT SAL FAC	03984 (24)
VAR135	# FT & PT SAL FAC WITH MD	03895 (23)
VAR136	# FMG FT & PT SAL FAC	03986 (24)
VAR137	# FEMALE FT & PT SAL FAC	03987 (24)
VAR138	# FT & PT SAL FAC RESPOND ETHNICITY	03988 (24)
VAR139	# ETHNIC MINORITY FT & PT SAL FAC	03989 (24)

VARIABLE NUMBER	LABEL	IPS NUMBER (SOURCE)/ COMPUTATIONAL FORMULA
VAR140	# FT & PT SAL FAC INBRED MD	03990 (24)
VAR141	# MD GRADS ON FAC OF ANY US MED SCH	03991 (24)
VAR142	# PT & FT SAL FAC: BAS SCI	03992 (24)
VAR143	# FT & PT SAL FAC WITH MD-PHD	03993 (24)
VAR144	# FT & PT SAL FAC: PROFESSOR	03994 (24)
VAR145	# FT & PT SAL FAC RETAINED, 1974-75	03995 (24)
VAR146	# ACTIVE MD GRADUATES, 1967	03996 (24)
VAR147	# FT BAS SCI PROFESSOR	06756 (57)
VAR148	# FT BAS SCI ASSOC PROF	06757 (57)
VAR149	# FT BAS SCI ASST PROF	06758 (57)
VAR150	# FT BAS SCI INSTR & OTHER	06759 (57)
VAR151	# FT BAS SCI FACULTY	06760 (57)
VAR152	# PT BAS SCI FACULTY	06761 (57)
VAR153	# VOL BAS SCI FAC	06762 (57)
VAR154	# FT CLINICAL PROFESSOR	06882 (57)
VAR155	# FT CLINICAL ASSOC PROF	06683 (57)
VAR156	# FT CLINICAL ASST PROF	06684 (57)
VAR157	# FT CLINICAL INSTR & OTHERS	06885 (57)
VAR158	# FT CLINICAL FACULTY	06886 (57)
VAR159	# PT CLINICAL FACULTY	06887 (57)
VAR160	# VOL CLINICAL FACULTY	06888 (57)
VAR161	# FT PROFESSOR ON MED SCH FAC	06889 (57)
VAR162	# FT ASSOC PROF ON MED SCH FAC	06890 (57)
VAR163	# FT ASSIST PROF ON MED SCH FAC	06891 (57)
VAR164	# FT INSTR & OTHERS ON MED SCH FAC	06892 (57)
VAR165	# FULL TIME FACULTY IN MED SCH	06893 (57)
VAR166	# PART TIME FACULTY IN MED SCH	06894 (57)

VARIABLE NUMBER	LABEL	IPS NUMBER (SOURCE)/ COMPUTATIONAL FORMULA
VAR167	# VOLUNTEER FACULTY IN MED SCH	06895 (57)
VAR168	# VACANT BAS SCI FAC POSITIONS	06935 (57)
VAR169	# VACANT CLINICAL FAC POSITIONS	07025 (57)
VAR170	# VACANT MED SCH FAC POSITIONS	07030 (57)
VAR388	AV SALARY - SFT ASSOC PROF BASIC SCIENCE	08608 (62)
VAR389	AV SALARY - SFT ASSOC PROF CLINICAL SCI	08612 (62)
VAR390	AV SALARY - SFT ASSOC PROF MEDICINE	08402 (62)
VAR391	AV SALARY - SFT ASSOC PROF ANATOMY	08338 (62)

B. Computed Variables

VARIABLE NUMBER	LABEL	IPS NUMBER (SOURCE)/ COMPUTATIONAL FORMULA
FAC001	% PT & FT SAL FAC WITH MD	100* VAR135 / VAR134
FAC002	% PT & FT SAL FAC: FMG'S	100* VAR136 / VAR134
FAC003	% PT & FT SAL FAC: FEMALE	100* VAR137 / VAR134
FAC004	% PT & FT SAL FAC FROM ETHNIC MINORITIES	100* VAR139/ VAR138
FAC005	% PT & FT SAL FAC: INBRED MD	100* VAR140 / VAR134
FAC006	% PT & FT SAL FAC IN BAS MED SCI	100* VAR142 / VAR134
FAC007	% PT & FT SAL IN BAS MED SCI - LCME-II	100* (VAR151 + VAR152) / (VAR165 + VAR166)
FAC008	RAT: BAS SCI FT FAC TO CLIN FT FAC	VAR151 / VAR158
FAC009	% PT & FT FAC WHO ARE MD-PHD'S	100* VAR148 / VAR134
FAC010	ANNUAL PT AND FT FAC TURNOVER RATE	100* (VAR134 - VAR145) / VAR134
FAC011	% FT BAS SCI FAC ASSOC PROF & ABOVE	100* (VAR147 + VAR148) / VAR151
FAC012	% FT CLIN FAC ASSOC PROF & ABOVE	100* (VAR154 + VAR155) / VAR158
FAC013	% FT FAC ASSOC PROF & ABOVE	100* (VAR161 + VAR162) / VAR165
FAC014	% VACANT FACULTY POSITIONS	100* VAR170 / (VAR165 + VAR170)

VARIABLE NUMBER	LABEL	IPS NUMBER (SOURCE)/ COMPUTATIONAL FORMULA
FAC015	% VACANT BAS SCI FAC POSITIONS	100* VAR168 / (VAR168 + VAR151)
FAC016	% VACANT CLIN FAC POSITIONS	100* VAR169 / (VAR169 + VAR158)
FAC017	RAT: FT FACULTY TO MD STUDENTS	VAR165 / VAR016
FAC018	RAT: PT FAC TO FT FAC	VAR166 / VAR165
FAC019	RAT: VOL FAC TO FT FAC	VAR167 / VAR165
FAC020	% FT CLIN FAC ASSOC PROF	100* VAR155 / VAR158
FAC021	% FT BAS SCI FAC ASSOC PROF	100* VAR148 / VAR151

IV. CURRICULUM VARIABLES.

A. Raw Variables

VAR252	CURR: AMBULATORY CARE EXP REQUIRED	00370 (3)
VAR253	CODED % 1973 MD STUD IN ELEC PRI-CARE	00372 (3)
VAR254	PRIMARY CARE DEPTS ENCOURAGE GENERALISTS	00375 (3)
VAR255	MED SCH INVOLVED WITH ACTIVE HMO	00376 (3)
VAR256	MED SCH TRAINING PHYSICIANS ASSISTANTS	00387 (3)
VAR257	MED SCH TRAINING NURSE PRACTITIONERS	00388 (3)
VAR258	MED SCH TRAINING MEDEX	00389 (3)
VAR259	EXTERNAL SUPPORT FOR TRAINING HEALTH PRAC	00396 (3)
VAR260	MED SCH GRAD PROG IN FAMILY MEDICINE	00403 (3)
VAR261	IS SINGLE DEPT RESPONSIBLE FOR EMERG-MED	00416 (3)
VAR262	EMERGENCY MED FORMAL PART OF UG MD CURR	00418 (3)
VAR398	REV CAREER CHOICE OF MD GRADS AT GRAD	00438 (3)
VAR263	REV CAREER CHOICE OF MD GRADS AFTER 5 YR	00439 (3)
VAR264	MED SCH POLICY TO ACCEPT TRANSFER MD STUD	04568 (26)
VAR265	# MD TRANSFER STUDENTS ACCEPTED, 1974-75	04573 (26)
VAR266	DURATION OF REGULAR MD PROGRAMS	04575 (26)
VAR267	ACCEL PROG: UNDERGRAD & MD IN LT 6 YR	04578 (26)
VAR268	MED SCH ACCEPTS MD STUD WITH ADV STANDING	04579 (26)

VARIABLE NUMBER	LABEL	IPS NUMBER (SOURCE)/ COMPUTATIONAL FORMULA
VAR269	SPEC ADVISORY PROGRAMS FOR DISADV MD STUD	04593 (26)
VAR270	MD STUD RET ACT: TUTORING BY FACULTY	04595 (26)
VAR271	MD STUD RET ACT: TUTORING BY MD STUD	04596 (26)
VAR272	FORMAL PROG FOR PHD SEEKING MD	04601 (26)
VAR273	REL ELECTIVES: ALCOHOLISM	04615 (26)
VAR274	REL ELECTIVES: BIOMEDICAL ENGINEERING	04616 (26)
VAR275	REL ELECTIVES: COMMUNITY MEDICINE	04617 (26)
VAR276	REL ELECTIVES: DRUG ABUSE	04618 (26)
VAR277	REL ELECTIVES: EMERGENCY MEDICINE	04619 (26)
VAR278	REL ELECTIVES: ETHICAL PROBLEMS IN MED	04620 (26)
VAR279	REL ELECTIVES: GERIATRICS	04621 (26)
VAR280	REL ELECTIVES: HEALTH CARE DELIVERY	04622 (26)
VAR281	REL ELECTIVES: HUMAN SEXUALITY	04623 (26)
VAR282	REL ELECTIVES: MEDICAL HYPNOSIS	04624 (26)
VAR283	REL ELECTIVES: MEDICAL JURISPRUDENCE	04625 (26)
VAR284	REL ELECTIVES: NUTRITION	04626 (26)
VAR285	REL ELECTIVES: PATIENT EDUCATION	04626 (26)
VAR286	REL ELECTIVES: POPULATION DYNAMICS	04628 (26)
VAR287	REL ELECTIVES: PRIMARY CARE	04629 (26)
VAR288	CURR INNOV: CLINICAL APPL OF COMPUTERS	04631 (26)
VAR289	CURR INNOV: COMPUTER ASSISTED INSTRUCTION	04632 (26)
VAR290	CURR INNOV: AMBULATORY CARE PROGRAM	04636 (26)
VAR291	GRADING: PASS-FAIL OR EQUIV	04643 (26)
VAR292	GRADING: HONORS-PASS-FAIL OR EQUIV	04644 (26)
VAR293	GRADING: LETTER-NUMBER GRADES	04645 (26)
VAR294	GRADING: SOME OTHER SYSTEM	04646 (26)
VAR295	CURR ADM: CURR EVALUATION COMM	04680 (26)
VAR296	CURR ADM: UNIT FOR RESEARCH IN MED ED	04690 (26)
VAR297	# MONTHS REQUIRED TO COMPLETE MD - MIN	07726 (26)

VARIABLE NUMBER	LABEL	IPS NUMBER/ COMPUTATIONAL FORMULA
VAR298	MD CAN BE COMPLETED IN LT 4 YR	07727
VAR299	MANDATORY 3-YR CURRICULUM	07729
VAR300	COMBINED COLLEGE MD PROG FOR HIGH SCH GR	07733
VAR301	COMBINED MD-PHD PROGRAM	07735
VAR302	MD PROGRAM FOR PHD'S - REDUCED TIME	07737
VAR303	5th PATHWAY PROG FOR FOREIGN MD GRADS	07740
VAR304	# STUDENTS IN 5TH PATHWAY PROG	07742
VAR305	# OF REQUIRED CLERKSHIPS	07743
VAR306	FAMILY MED TRNG PROG FOR UNDERGRAD MD-ST	07760
VAR307	OTHER PRIMARY CARE PROG FOR UG MD-STUD	07763
VAR308	MD STUD REQUIRED TO TAKE NBME-I	07766
VAR309	MD STUD REQUIRED TO TAKE NBME-2	07767

B. Computed Variables

CRC001	INDEX OF ELECTIVE UTILIZATION, 1976	(.344* VAR273) + (.277 * VAR276) + (.104 * VAR281) + (.177 * VAR278) + (.122 * VAR284) + (.110 * VAR283) + (.117 * VAR280)
CRC002	# OF RELATED ELECTIVES OFFERED	IF(VARX EQ 1) CRC002 = CRC002 = 0 INITIALLY, AND VARX = VAR273 to VAR287

CRC003	% MD STUD IN AMBULATORY CARE EXP, 1973	IF (VAR252 EQ 'YES') CRC003 = 100
		IF (VAR252 EQ 'NO' AND VAR253 EQ 'A') CRC003 = 12.5
		IF (VAR252 EQ 'NO' AND VAR253 EQ 'B') CRC003 = 37.5
		IF (VAR252 EQ 'NO' AND VAR253 EQ 'C') CRC003 = 62.5
		IF (VAR252 EQ 'NO' AND VAR253 EQ 'D') CRC003 = 87.5

APPENDIX C

Abbreviations Used in 1976 Researchable Data Base Variable Labels

$	Dollars
#	Number
%	Percent
% Chg	Percent Change
A-Health	Allied Health
Accel	Accelerated
Act	Avcite, Activity
Adm	Administration
Admin & Genl	Administration & General
Admt	Admitted
Adm-Pref	Admittance-Preference
Adu Stdg	Advanced Standing
AEC	Atomic Energy Commission
Affil	Affiliated
Agrmt	Agreement
Alum	Alumni, Alumnae
Amer	American
Amt	Amount
Annl	Annual
App	Applications, Applicant
Applicnts	Applicants
Apply	Applying
Appr	Appropriations
Assist	Assistant (ASST)
Assoc	Associate
Avail	Available
Av	Average
BA	Bachelor of Arts
Bas	Basic (Sciences)
Bal	Balance
BHRD	Bureau of Health and Resources Development
BMS	Basic Medical Sciences
BS	Bachelor of Science
Budg	Budget(ed)
Bus & Ind	Business and Industry
Ch	Choice
Chg	Change
Clin	Clinical (Sciences)

APPENDIX C (Continued)

Coll	College
Comm	Committee
Comp	Competing
Con$	Constant Dollars (adjusted for inflation)
Curr	Curriculum
Def	Deficit
Deg	Degree
Dept	Department (al)
DHEW	Dept. of Health, Education and Welfare
Diff	Difference
Dir	Direct
Disadv	Disadvantaged
Dist	Distributed
DOD	Dept of Defense
DRG	Division of Research Grants (NIH)
Ed	Education, Educational (Educ)
Elec	Electives
Emerg-Med	Emergency Medicine
Endow	Endowments
Enroll	Enrollment
Equivs	Equivalents
Exp	Expenditures (Expd)
Fac	Faculty
Facil	Facility
Fed	Federal
Fem	Female
Fin	Financial
Fin-Yr	Final Year
FMG	Foreign Medical Graduate
Fr	From
FT	Full Time
Gen	General
Govt	Government
GPA	Grade Point Average
Grad	Graduate
GT	Greater than
HMO	Health Maintenance Organization
IMPAC	DRG's computer file of grants & contracts

APPENDIX C (Continued)

Incl	Including
Indir	Indirect (Ind)
Innov	Innovations
Instr	Instructor
Instrct	Instructional
Intrn	Interns
IRG	Initial Review Group (study section)
LCME	Liaison Committee on Medical Education
Liv	Living
Log	Logarithm
LT	Less Than
Matric	Matriculant
MCAT	Medical College Admissions Test
MD-Stud	Medical Student
Med	Medical
Med-Sch	Medical School
Mid-Yr	Middle Year
Min	Minority
Mnlnd	Mainland
MS	Master's degree
Multi-Purp	Multi-Purpose (MP)
Multi-Serv	Multi-Service
NBME-1	National Board Medical Examiners (test) - Part I
NBME-2	National Board of Medical Examiners - Part II
NIH	National Institutes of Health
NIMH	National Institute of Mental Health
Non-Govt	Non-Governmental
Non-Res	Non-Resident
NSF	National Science Foundation
Oper & Maint	Operation and Maintenance
Org	Organized, Organizational
Outpat	Out patient
P-Scr	Priority Score
P01	Program and Project Grants
Phys	Physical
Pop	Population
Pos	Position
Post-Docs	Post-Doctorates
Post-Grad	Post-Graduates
Prac	Practice

APPENDIX C (Continued)

Pre-Med	Pre - Medical
Priv	Private
Prof	Professional
Prog	Program (Pgm)
Projtd	Projected
PT	Part Time
Pub	Public
Quant	Quantitative
R01	Traditional Research Grants
Rat	Ratio
Rec	Received
Recov	Recovery (RCOV)
Reg Oper Expd	Regular Operating Expenditures
Rel	Related
Res	Research
Resrv	Reserves
Ret	Retention
Rev	Revenues
Rsdnt	Resident
Sal	Salary
SBMT	Submitted
Sch	School
Sci	Science
SD	Standard Deviation
Sep	Separately
Serv	Service
SFT	Strict Full Time
SMSA	Standard Metropolitan Statistical Area
Spec	Special, Specialty
Spons	Sponsored
Sq	Square
St & Loc	State and Local (S&L)
St Rel	State Related
Std	Standardized
Stud	Student
Tch-Trn	Teaching and Training
Tchng	Teaching
Tot	Total
Undergrad	Undergraduate (Ungrad, UG)

APPENDIX C (Continued)

Underrep	Under-represented
Unk	Unknown
Unrestr	Unrestricted
US-Can	United States and Canadian
Vol	Volunteer
Yr	Year